

CHEMICAL WEAPONS CONVENTION BULLETIN

News, Background & Commentary Relevant to Chemical Weapons & Chemical Arms Control

ISSUE NO. 19

MARCH 1993

Quarterly Journal of the Harvard-Sussex Program on CBW Armament and Arms Limitation

INTERNATIONAL ORGANIZATION FOR CHEMICAL DISARMAMENT BEGINS

The Chemical Weapons Convention (CWC) was opened for signature in Paris on 13 January 1993. The occasion was ceremonial, attended, so French Foreign Minister Roland Dumas said at the close two days later, by more than 150 countries. Entry of the treaty into force cannot occur before 13 January 1995, but is expected then or soon afterwards. Many practical arrangements must have been completed by that time.

A Preparatory Commission is now taking charge. It convened in The Hague for its inaugural, five-day, session on 8 February. The proceedings were opened by a special representative of the depositary of the treaty, who is the Secretary-General of the United Nations. He announced that 136 states had thus far signed, thereby qualifying for membership of the Commission. Ninety-two chose to participate. The session achieved everything that was expected of it. As far as international organization goes, chemical disarmament seems now to be well on track.

The Preparatory Commission, otherwise known as the "PrepCom", has as its charter a resolution adopted without vote in Paris by states signatories of the CWC. The resolution approved the *Text on the Establishment of a Preparatory Commission*, which the CD had negotiated alongside the CWC itself. The PrepCom is charged with "carrying out the necessary preparations for the effective implementation" of the CWC and with preparing for the first session of the Conference of States Parties – in other words, doing everything necessary "to ensure the rapid and effective establishment of the future Organization for the Prohibition of Chemical Weapons", the OPCW, which is to be headquartered in The Hague.

The Text lists some 40 separate tasks for the PrepCom, many of them highly complicated technically or politically or both. The Foreign Minister of The Netherlands, Dr. P. H. Kooijmans, aptly summarized them at the opening of the inaugural session:

As the precursor of the future Organization, the Preparatory Commission enshrines the collective responsibility of all Signatory States for the Convention. During the next two years that collective responsibility will be put to the test. After all, much remains to be done if the splendid blueprint of the Convention is to be turned into a living reality. You will have to work out the technical regulations and other provisions as well as the organizational requirements needed to implement the Convention. In doing so, you as national representatives will have to synchronize your efforts with those of a fast growing Provisional Technical Secretariat that will constitute the hard core of the future Organization. Lastly, and parallel to the building-up of the Organization, the Preparatory Commission should function as a clearing-house for the exchange of national information between Signatory States.

He might have added, too, that the PrepCom will also have the awkward, not to say perilous, task of repressing attempts to renegotiate the treaty while at the same time agreeing whatever interpretations are necessary for the formulation of practicable working rules.

Preceding the inaugural session were several months of behind-the-scenes negotiation among governments on how exactly the PrepCom should be constituted and staffed. The process had begun in Geneva even before the CD agreed its text for the treaty [see News Chronology, 26 Aug 92]. The process continued in New York at the UN General Assembly and then resumed in Geneva, some of it during consultations set up by the cosponsors of the General Assembly resolution commending the CWC

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for signature [see News Chronology, 23 Oct 92], some of it in regional and other political-cooperation fora, and some of it straightforward wheeling and dealing between individual delegations. The Cosponsors-Group consultations, chaired by Australia, coordinator of the Western Group (which seems to have been the prime mover in the process), brought together representatives of each of the five regional groups specified in Article VIII of the CWC. These are the groups that will be required to designate representatives on the OPCW Executive Council, namely states parties from Africa, from Asia, from Eastern Europe, from Latin America and the Caribbean, and from "Western European and Other States" (WEOS).

One key element in all this bargaining was the international disposition of responsibilities in the organization that was being created. Another was, in effect, the rules of procedure for the PrepCom: the definitions of relationships within the organization and between it and the outside world. Nonsignatory states were the immediate consideration in this latter regard, apparently overshadowing the question of relations between the PrepCom and nongovernmental entities such as the chemicals industry. Italy and Germany assumed initial responsibility for the actual drafting of the rules [see News Chronology, 9 Nov 92]. Once these key elements had been negotiated, the quest for consensus could move to lower levels of the nascent international organization, to which end governments were, by January, beginning to distribute diplomatic notes listing their own favored candidates for the available jobs.

A common hope early in the process had been to secure agreement on the chair, bureau (if judged necessary) and executive secretary of the PrepCom in time for the CWC signature ceremony in Paris so that, immediately after the ceremony, assuming that at least the requisite fifty states had signed, the Commission could convene and formally accept what had

been decided, thus getting off to a running start. That ambition, however, fell foul of discord, not so much between the regional groups as within them, most conspicuously within the WEOS Group. By the time of Paris, harmony, though seemingly nearer, had still not been achieved, and new discords had started up, not least in the Group of Asian States: the preferences of China were only just beginning to be displayed.

It is a measure of the success of the PrepCom's inaugural meeting that, by the end of it, disagreements so sharp and interwoven had come to be resolved. The question of the chair was settled speedily, but negotiations on an acceptable mix of regional representation in the Provisional Technical Secretariat and other structures of the PrepCom consumed most of the week. The results of the deliberations, reported below, represent a delicate balance of interests which the Commission endorsed in its final report on the session.

PrepCom Structure. The chairmanship of the PrepCom is to rotate every six months among the five regional groups in alphabetical order starting with a representative of the African Group. Ambassador Azikiwe of Nigeria assumed the chair on 8 February. When the Asian group takes over in August, Iran is currently its expected nominee. Possibly the prospect of the WEOS Group being in charge during the transition from PrepCom to OPCW will affect the rate of ratification of the CWC.

The Chairman is to be "supported" by five Vice-Chairmen representing each of the regional groups and elected upon recommendation of each group in conjunction with election of each Chairman. Currently they are the representatives of Chile, Hungary, Iran, Tunisia and the United States. The precise nature of their duties, other than standing in for the Chairman when necessary, is not yet entirely clear. Only two of the vice-chairmen were coordinators of

The *Chemical Weapons Convention Bulletin* (ISSN 1060-8095) is edited and published quarterly by the Harvard-Sussex Program on CBW Armament and Arms Limitation. The goal is to provide information and analysis toward an effective multilateral treaty which will eliminate chemical weapons and help prevent the exploitation of biomedical technologies for hostile purposes.

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The *Bulletin* is produced at and available from the Federation of American Scientists, 307 Massachusetts Avenue NE, Washington DC 20002 [phone 202-546-3300]. The annual price is \$25 for US subscribers and those abroad who are able to pay it.

their regional groups when elected (Chile and Iran); and, in its report on the inaugural session, the PrepCom in the end avoided any explicit mention of a Bureau to assist the chair, that having been a concept previously much promoted by several delegations outside the WEOS Group.

The PrepCom is to conduct its work in plenary meetings, establishing such committees or other subsidiary bodies as it deems necessary. In addition to a Credentials Committee and the Provisional Technical Secretariat, the PrepCom agreed at its inaugural session to establish two working groups open to all member states: Working Group A (Budget and Administration) chaired by Alberto Villamizar of Colombia, and Working Group B (Verification and Technical Cooperation and Assistance) chaired by Sylwin Gizowski of Poland. The expectation was that each Working Group would mandate groups of experts, also open to all member states, to work on particular tasks. Expert-Group reports would then be considered at sessions of the Working Group, whose own reports would be considered, and acted upon, by the PrepCom in plenary session: a filtering mechanism this, borrowed from the old US-Soviet CW bilaterals. Signatory states that are able to do so are expected to send specialists, as well as Hague-embassy staff and officials from capitals, to participate in all levels of PrepCom activity, including the Experts' Groups.

Working Group A met for the first time on 12 February. The PrepCom had asked it to establish Experts' Groups as required, directing them initially to prepare: (a) a PrepCom budget and scale of assessments for the first year of operation; (b) a PrepCom program of work for the first year of operation; (c) PrepCom rules of procedure, to replace the provisional rules adopted for the inaugural session; (d) PrepCom financial regulations and rules; (e) PrepCom staff rules; (f) a PrepCom Privileges and Immunities Agreement with the Host Government; and (g) recommendations for the OPCW permanent building requirements. These Expert-Group reports are to be presented to the Working Group in time for the latter to "prepare for decision" by the PrepCom at its second plenary session, beginning on 19 April.

Working Group B is not to convene until after the second plenary session, during which its work program will have been decided. Late April, then, will be when the PrepCom begins to address substantive matters of implementation.

The Provisional Technical Secretariat. The charter of the PrepCom expressly requires that it "estab-

lish a provisional Technical Secretariat to assist the Commission in its activity and to exercise such functions as the Commission may determine, and appoint the necessary staff in charge of preparatory work concerning the main activities to be carried out by the Technical Secretariat to be established by the Convention". To this end, the PrepCom, on the penultimate day of its inaugural session, finally achieved consensus on establishing a Provisional Technical Secretariat (PTS) that would be composed of an Executive Secretary, as its head and chief executive officer, and "such other staff as may be required". Ian Kenyon of the UK CD delegation was appointed Executive Secretary. His candidacy, advanced early and strongly by the UK, had been a powerful nucleating agent during the negotiations of the previous several months.

The formal record of decision continued: "The Executive Secretary shall: (a) administer work programs and budgets approved by the Preparatory Commission; (b) direct and manage the Secretariat in its work in implementing such programs and budgets; and (c) in matters of staff appointments, make recommendations to the Preparatory Commission on appointments to senior management positions [defined as "Grade D-1 (Principal Officer) equivalent and above"], and directly appoint all other necessary staff (subject only to appropriate reporting to and liaison with the Preparatory Commission), in both cases in accordance with the principles contained in Article VIII paragraph 44 of the Convention." That reference to Article VIII meant that the criterion of geographic representation, and of course the criteria of competence, efficiency and integrity as well, were to be applied in appointments to the PTS as a whole and to the senior positions in particular.

Following extensive consultations, the new Executive Secretary announced his recommendations for six senior management appointments, thereby also implying a certain structure for the PTS: a Deputy Executive Secretary position, to be filled by one of the three candidates put forward by the Governments of China, India and Pakistan; a Verification Division, to be headed by John Gee of Australia; an Administrative Division, to be headed by Robert Howard of the United States; a Legal Division, to be headed by Felix Calderon of Peru; an External Relations Division, to be headed by Serguei Batsanov of Russia; and a Technical Cooperation and Assistance Division, to be headed by an African candidate. Secretary Kenyon asked for authorization to appoint Messrs. Gee, Howard and Calderon immediately and Ambassador Batsanov during April.

By the close of the inaugural session, a number of names had emerged as front-runner candidates for 18 PTS appointments immediately below the D-1 level. But neither these, nor the fine structure of the secretariat which they would imply, have achieved any public official status at the time of writing.

A provisional budget for the first three months of PTS operations had been developed by the United Kingdom some months previously [see News Chronology, 26 Oct 92]. It estimated the costs at just over \$1.8 million, of which rather more than half would be consumed by conference services. This budget was formally adopted by the PrepCom, together with a scale of assessments setting out the contributions expected from signatory states to cover the costs. It was announced during the inaugural session that \$1.13 million had already been contributed by Australia, Bulgaria, Denmark, Finland, New Zealand, Sweden and the United States; and France, Germany, Spain and the United Kingdom made promises of immediate contributions that would bring the total to just above \$2 million. As for the longer term, a provisional estimate of costs for the first year of operations totalled \$9.87 million [see News Chronology, 9 Nov 92]. It envisaged a PTS establishment of 39 people, including 16 clerical and other support staff. Its refinement is one of the tasks currently before Working Group A.

Future Work and Issues. When the PrepCom convenes for its second plenary session, during 19-22 April, it will receive a report from its Executive Secretary. Among other matters, this will presumably record the practical help provided by the United Nations, assurance of which had been a feature of the statement by the UN Secretary-General's Special Representative when opening the PrepCom. The plenary will then move into consideration of the recommendations of Working Group A derived from the Expert-Group reports noted above. It should thus be adopting a budget and program of work for the remainder of 1993. That done, the PrepCom will be able to specify exactly what Working Group B is to do, setting a mandate both for it and for Working Group A for what the inaugural-session report calls "the next work period". The third plenary session has provisionally been scheduled for 7-8 July; the fourth and fifth, for 20-23 September and 15-17 December [see News Chronology, 2 Dec 92].

The inaugural session successfully accomplished its principal tasks of establishing, by consensus, the major structures of the PrepCom, including the PTS. Although it was characterized, as were the preceding

negotiations, by strong tensions on a North-South axis, it seems that members were sufficiently accommodating to avoid delay in the PrepCom's work, and sufficiently disciplined to refrain from raising extraneous issues.

A major challenge for the PrepCom will be the engagement of a wide range of signatory states in the detailed work of the Experts' Groups. Without broad participation and/or consultation via the regional groups, the PrepCom may find its work significantly delayed by the reopening at plenary level of issues exhaustively discussed at the Expert-Group level. All but the largest and wealthiest states lack the resources to follow, let alone contribute to, the work of the Experts' Groups. Mechanisms need to be found which will provide for regular consultation and effective communication between delegations active in the PrepCom subsidiary bodies and those unable to participate at such levels. Substantial responsibilities in this regard will fall to the regional-group coordinators and to the PTS.

Provisions to promote access to the PrepCom on the part of the chemicals industry and other nongovernmental entities, and vice versa, are urgently required also. Industry cooperation will be vital in ensuring the smooth functioning of verification arrangements. The world of science and technology more generally must be induced to take an interest in the organization in order to ensure that, in the future, the treaty can keep up with scientific progress and technical change; for if the treaty does not do so, it will surely die. And nongovernmental organizations, including industry and trade associations, have roles to play in the supporting political processes, notably ratification of the CWC in countries such as the United States, and the allocation of resources for CWC implementation work at international and national levels. In all of these respects, the provisional PrepCom rules of procedure are clearly defective. They fail to make adequate allowance for the requisite channels of communication.

This whole issue of transparency is currently under consideration by the Executive Secretary, who expects to make recommendations shortly. Building up a broad constituency of friends and allies of the CWC and its organs is not the least of the many tasks now confronting the PrepCom. ■

This report was written by Peter Herby of the Quaker United Nations Office, Geneva, and Julian Perry Robinson, both of whom attended the CWC signature ceremony and the opening of the PrepCom.

A PERSPECTIVE ON THE OPCW PREPARATORY COMMISSION

by **Counsellor Shahbaz**

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The Chemical Weapons Convention is a milestone on the road to general and complete disarmament, particularly as it provides for the total elimination of a whole category of weapons of mass destruction and creates an elaborate and intrusive verification regime to ensure compliance with its provisions. However, the conclusion of the Convention, by itself, cannot be viewed as the final and definitive act in the area of chemical disarmament, as much is required to be accomplished in terms of operationalizing the Convention. This task has to be performed by the Preparatory Commission of the Organization for the Prohibition of Chemical Weapons (OPCW) which held its first session in the Hague, the seat of the future Organization, from 8 to 12 February 1993.

This article offers some views on the first session of the PrepCom, and includes observations on the manner in which the PrepCom should proceed with its task so that the credibility of the Convention, which is necessary for the desired objective of universality, is enhanced, particularly when ratification by Signatory States is the next important milestone.

Regional Representation in the Provisional Technical Secretariat. With 130 countries signing the Convention at the ceremony in Paris, one would have expected the PrepCom to take off with a running start. This did not happen because of differences among regional groups on organizational matters. The ensuing deadlock could have been avoided had a group of countries not made an attempt to stack the Provisional Technical Secretariat with officials of its own preference.

In the lead-up to the first meeting of the PrepCom, an understanding had emerged among all the prospective participants as to who should occupy the post of the Executive Secretary. For the other slots, although the final shape of the Provisional Technical Secretariat was never clearly established, there was a strong desire by a majority that they should be allocated on the basis of equitable geographical distribution, a principle whose paramouncy had been clearly established following extensive discussions during the CWC negotiations.

However, when the PrepCom opened in the

Hague, delegations from the developing countries were confronted with a list of nominees, often multiple, for nearly every possible senior level position in the Provisional Technical Secretariat. What was striking about this list was the fact that, with the exception of two nominees from the developing countries, all others belonged to the Western Group or to the East European Group. While the developing countries had been slow in putting forth their nominees, the message that came through clearly on that February morning in the Hague was that adequate and equitable representation of developing countries in the Provisional Technical Secretariat was obviously not a priority, and that a majority of the participants would have only a token or no representation at all in the Secretariat.

What followed is now history. Meetings were adjourned, consultations were held, proposals were made, and a compromise was reached, only after the structure of the Provisional Technical Secretariat had been clearly spelt out, and the primacy of the principle of equitable geographical distribution was firmly established, not only for filling the senior positions, but for all levels. Of course this was without prejudice to the requirement "of securing the highest standards of efficiency, competence and integrity". These qualities can indeed be found in all geographical regions without any difficulty.

The experience of the first PrepCom exemplified how not to proceed with its work in the future. Consultation, cooperation and transparency are the key principles that should guide the PrepCom, failing which there are likely to be frequent blockages resulting in unnecessary delays in the performance of its task.

Balances. The Chemical Weapons Convention is the result of a lengthy, and at times, frustrating period of negotiations spread over more than two decades. Originally conceived as an East-West disarmament issue it gradually evolved, following the end of the Cold War, into a North-South debate. In the final analysis it seeks to embody within its provisions a number of delicate balances – between developed and developing countries, CW possessors and non-possessors, national sovereignty and intrusiveness,

permitted and prohibited activities, confidentiality and transparency, and benefits and burdens – which are a testament to the difficult terrain the negotiators had to traverse in order to conclude the Convention. Needless to say these balances would have to be maintained and further shored up, where necessary, in order to sustain the credibility of the Convention.

That said, it is pertinent to mention here that some glaring imbalances have also been incorporated in the Convention, thereby providing a basis for potential misuse and abuse of its provisions in the future. Examples of such shortcomings can be found in Article VIII, where the industrial criterion for membership of the Executive Council has been accorded greater importance than other criteria; in Article IX and the relevant part of the verification Annex relating to challenge inspection, where intrusiveness has been placed on a higher pedestal than safeguards against possible abuse; in Article X, where the concept of automaticity and predictability is missing, thereby leaving it to the discretion of the States Parties to act even in those obvious cases where assistance is required; in Article XI, where no clear commitment has been incorporated to the effect that existing export controls on certain chemicals would be withdrawn once the verification provisions of the Convention come into effect, etc. These are just a few examples of the imbalances which through a more positive and forward looking application of the Convention's provisions, can be rectified by the PrepCom as it proceeds to develop guidelines and implementation procedures for different Articles.

As delegations which had participated in the negotiations in the CD are expected to be present in the Hague as well, the possibility of making progress along these lines is bright provided all participants show a commitment to enhance the attractiveness of a Convention which has deep economic and security implications for all. This can only be accomplished if the temptation to steamroll a particular point of view is resisted.

Participation of Arab States. The concept of universal adherence to the Convention was discussed extensively in the negotiations, and was one of the primary considerations before the drafters of the Convention. The fact that until now more than 130 countries have signed the Convention is a testament to the success of their endeavors. Significantly, however, some of the key States of the Middle East and North Africa, namely Egypt, Syria, Jordan and Libya, have still not come on board for well known and well argued reasons. The importance of these States for

the success of the Convention cannot be underestimated. Equally true is the fact that their participation in the work of the PrepCom would contribute to the further consolidation of the balances contained in the Convention. The important role played by Egypt in the negotiations is well-known and its absence from the PrepCom will be missed. These States have already sent a strong message to the concerned quarters that unless their preoccupations about the presence of weapons of mass destruction in their region are addressed in an adequate manner they would not lend their support to a treaty which discriminates against them.

Signing the Convention, however, need not compromise or erode their principled position on the Convention. On the other hand, their signature now would enable them to participate in the PrepCom's activities, where they would attend and safeguard positions which are of crucial interest to them. At the same time they would still retain the option of not becoming States Parties by withholding ratification of the Convention if their concerns about their regional situation are not adequately satisfied.

Conclusion. The PrepCom will soon enter a period of intense and intensified work so that it can meet the deadline of early 1995 when the convention is likely to enter into force. Given the political will, and a constructive approach on the part of all its members, there is no reason why it cannot come up with a response which would encourage early ratification of the Convention and further the prospects of universal adherence. ■

Forthcoming Events

- The second plenary session of the OPCW PrepCom will be held during 19-22 April in the Hague.
- The "First Moscow Conference on Chemical and Biological Disarmament, Demilitarization and Conversion", sponsored jointly by the President of the Russian Federation's Committee on Chemical and Biological Convention Matters, the Academy of Sciences of the Russian Federation, the Virginia-based Chemical and Biological Arms Control Institute, and the International Center for Disarmament and Conversion will be convened during 19-21 May in Moscow. The registration fee is \$500. For more information, contact Kyle Olson at (703) 738-1538.
- The third meeting of the group of governmental experts studying potential BWC verification measures (VEREX III) will be held 24 May-4 June in Geneva.

What follows is taken from the Sussex-Harvard rolling CBW chronology. The intervals covered in successive Bulletins have a one-month overlap in order to accommodate late-received information. The basic chronology, which is continuously updated, is fuller and provides complete citations of sources. For access to it, apply to Julian Perry Robinson at the Science Policy Research Unit, University of Sussex, Brighton, BN1 9RF, England.

2 November In Moscow, Dr Vil Mirzayanov [see 22 Oct] is released from custody on his own recognizance [Izv 3 Nov in FBIS-SOV 4 Nov; BS 3 Nov]. The charge against him, under Article 75 of the RSFSR Criminal Code, has not been dropped, meaning that he still faces the possibility of at least a two-to-five year jail sentence [InterFax 3 Nov in FBIS-SOV 3 Nov]. The public relations center of the Ministry of Security makes it known that, while Dr Mirzayanov had been employed, he had signed an undertaking not to divulge the nature of his activities [Utro (Moscow Central TV) 5 Nov in FBIS-SOV 12 Nov].

The Chairman of the Presidential Commission on CBW Convention Problems, General Academician Anatoliy Kuntsevich, suggests in a subsequent press interview that Dr Mirzayanov had disclosed a state secret merely by announcing publicly that a particular institute was working on CW agents, "particularly when we and the Americans have not yet exchanged data on the structure of facilities developing chemical weapons". He adds: "I do not think there could have been any tests in Nukus [see 16 Sep] in 1991-1992" [RG 11 Nov in FBIS-SOV 19 Nov].

While Dr Mirzayanov was in prison, he had reportedly been shown an accusation signed by GSNIIOKhT Director Viktor Petrunin stating that he had revealed the following secrets: that binary weapons were being developed at the institute; that a new weapon had actually been developed; and the identities of test and production sites for chemical weapons [Bulletin of the Atomic Scientists March 1993].

3 November From the Ingush-Ossetian conflict in the Caucasus, there are reports attributed to doctors in Grozny of chemical burns among wounded Ingushes brought for treatment there [ITAR-TASS 3 Nov in FBIS-SOV 3 Nov]. Ossetian use of chemical weapons had been reported two days previously [ITAR-TASS 3 Nov in FBIS-SOV 3 Nov; Russia's Radio 2 Nov in BBC-SWB 4 Nov].

3 November In Mannheim, Germany, the trial begins of Andreas Böhm, a former managing director of Salzgitter Industriebau GmbH [see 13 May]. It is the fourth in the series of prosecutions directed against the CW-related business in Libya of Imhausen-Chemie GmbH and its associates [see 24 Sep]. According to the indictment, Dr Böhm had delivered detailed plant designs for the manufacture of sarin, soman and mustard gas [FAZ 4 & 25 Nov].

4 November In Washington, the Center for Strategic & International Studies hosts a roundtable on Biological Weapons in the 1990s: New Challenges, New Policies?

4-9 November In Iraq, a visiting UNSCOM team led by Ron Manley of the UK commissions the incinerator that has been built at al-Muthanna to destroy mustard gas [see 24 Sep].

Eight tons of the agent are burned during the visit. When full-scale operations begin, in the next few days, the burn rate should reach about 3.5 tons per day. The al-Muthanna chem-demil facility has 34 resident UNSCOM personnel and 200-400 Iraqi staff [Ind 5 Nov].

6 November In eastern Germany, in the Seelow district of Brandenburg, an old Wehrmacht chemical-weapons production plant is reported to have been found underground, apparently flooded since 1945 [Märkischen Oderzeitung 6 Nov in FAZ 7 Nov].

8 November In Russia, President Yeltsin issues a ukase *On Special Means of Self-Defense Equipped with Lacrimator and Irritant Agents*. Unlicensed sale of tear-gas and similar self-protection weapons in Russia is to be forbidden. [Commerzant 26 Jan]

8 November In Liberia, the international peacekeeping force ECOMOG [Economic Community of West African States Ceasefire Monitoring Group] denies the accusation by the National Patriotic Front of Liberia that ECOMOG is using chemical weapons in efforts to repel and contain NPFL attacks on Monrovia. The ECOMOG statement says that the peacekeeping force has no chemical weapons and that the accusation may mean that the NPFL is itself acquiring some. [Radio ELBC (Monrovia) 9 Nov in JPRS-TND 24 Nov]

9 November At the UN General Assembly, a second revision of the draft resolution commending the CWC [see 28 Oct] is tabled in the First Committee. The resolution now has 144 co-sponsors.

There is a final meeting of the Cosponsors Group [see 23 Oct]. Australia distributes a third paper on the CWC Preparatory Commission, *PrepCom Costing—the First Year*, described in Ambassador O'Sullivan's cover letter as having been "prepared jointly by a number of Geneva-based Western delegations". It sets out cost estimates for the first year's operations of the PrepCom and includes a projected table of establishment. The estimates total \$9.87 million.

Germany and Italy distribute a joint paper setting out draft rules of procedure for the first session of the PrepCom. One of its potentially controversial features is its proposal that "plenary meetings of the Commission shall be held in private unless the Commission decides otherwise".

Other national papers besides the earlier Australian ones [see 19 and 26 Oct] had been distributed beforehand. They included an Iranian paper setting out a structure for the PrepCom rather different from that envisaged in the first Australian paper, a German paper on the projected Verification Division of the provisional Technical Secretariat, a South African paper commenting on the German one, and a New Zealand paper on the specific implementation tasks facing a small

country, including the establishment of its Article VII National Authority.

The situation thus far reached in the Gang-of-Five consultations on the PrepCom [see 23 Oct] is summarized as follows:

"Chairman:

There was broad agreement but no consensus that the chairmanship should rotate and that the rotation should be on a six monthly basis.

There was no agreement on which group should start the rotation, it being felt that more discussion was needed and that the question could only be resolved after the process of nominating an Executive Secretary had been taken further.

"Executive Secretary:

There was agreement to encourage as early advice as possible about intentions to nominate candidates for this position by states which are potential signatories to the Convention. To this end, the Chairman of the Cosponsors Group wrote to all states eligible to become signatories to the CWC. Consultations have also been held within the regional groups. So far there has been advice of three candidates.

"Bureau:

There was broad agreement, but no consensus, to consider questions concerning the Bureau at this stage. Some favored a rather small Bureau (5); there was some support for a Bureau of 15; most expressed a preference for 10.

There was no agreement on whether the Bureau should be fixed for the period of the Prepcom or whether it should rotate, and how that might be done. Views varied on how best to strike a balance between the efficiency and the representativeness of the Bureau, particularly if Bureau members were also to serve as Chairmen of working groups."

9 November The US House Armed Services Committee panel established in May to report, under the chairmanship of Congressman Glen Browder, on CBW defense preparedness issues [see 1 Oct] is now in London beginning a 9-day European tour in which it will meet with British, Dutch and German officials and visit CBW defense establishments. {DN 7 Dec}

9 November In Washington, the new International Center for Disarmament and Conversion (ICDS) [see 2 Oct] sponsors a

briefing by General Anatoliy Kuntsevich on the status of Russian chemdemil plans. General Kuntsevich says that, on 30 October, a committee of the Russian legislature had approved the plan [see 26 Oct] to convert an existing chemical-weapons production facility to chemdemil production and to build two other chemdemil facilities. He says that, while US companies are expected to play a leading role in building these facilities, Moscow has also signed an agreement with Germany [see 6 Sep] and has initiated talks with French and Italian companies. He urges the US Defense Department to make haste in finding the requisite American contractor [see 21 Aug] {ITP 12 Nov}. Quoting unidentified sources, *Defense News* later reports that the US Government, in addition to the \$25 million in Nunn-Lugar funds already earmarked for the Russian chemdemil program [see 30 Jul], has since pledged an additional \$30 million {DN 16 Nov}.

The Center announces that there is to be a major three-day international conference in Moscow next May on CBW disarmament, destruction and industrial conversion {ICDS press release, 9 Nov}.

10 November The British government announces that an independent judicial inquiry, to be headed by Lord Justice Scott, is to investigate the Matrix Churchill affair {HansC 10 Nov}. The prosecution case had collapsed the week previously amidst indications of ministerial and official connivance in illegal arms sales to Iraq {Cowley, *Guns, Lies and Spies: How We Armed Iraq*, 1992; David Leigh, *Betrayed: The Real Story of the Matrix Churchill Trial*, 1993}, including sales of equipment destined for Iraqi chemical-weapons factories [see 12 Oct] {Sweeney, *Trading with the Enemy: Britain's Arming of Iraq*, 1993}. The terms of reference of the inquiry are subsequently extended to cover all British arms sales to Iraq, including supergun technology, from 1984 to August 1990 {TL 17 Nov}. Findings are not expected much before the end of 1993 {FT 2 Feb; Guar & DTel 5 Feb}.

12 November At the UN General Assembly in New York, the First Committee adopts by consensus the 144-nation resolution commending the Chemical Weapons Convention [see 9 Nov] {AN-NA 25 Nov; DN 24 Nov}. Among other things, the resolution welcomes the invitation of the President of the

Glossary of Abbreviations for News Chronology

ACR	<i>Arms Control Reporter</i>	DN	<i>Defense News</i>	Service (Washington)
AN-NA	<i>Atlantic News</i>	DPA	<i>Deutsche Presse Agentur</i>	KZ <i>Krasnaya Zvezda</i>
BBC-SWB	<i>BBC-Summary of World Broadcasts</i>	DTel	<i>Daily Telegraph</i> (London)	MN <i>Moscow News</i>
BG	<i>Boston Globe</i>	DW	<i>Defense Week</i>	NG <i>Nezavisimaya Gazeta</i>
BS	<i>Baltimore Sun</i>	FAZ	<i>Frankfurter Allgemeine Zeitung</i>	NV <i>Novoye Vremya</i>
CBW	Chemical/biological warfare	FBIS	<i>Foreign Broadcast Information Service</i> (Washington)	NYT <i>New York Times</i>
CD	Conference on Disarmament	FedR	<i>Federal Register</i> (Washington)	Obs <i>Observer</i> (London)
CD/	CD document	FR	<i>Frankfurter Rundschau</i>	S/ UN Security Council document
C&EN	<i>Chemical & Engineering News</i>	FT	<i>Financial Times</i> (London)	ST <i>Sunday Times</i> (London)
CN	<i>Current News Early Bird</i>	Guar	<i>Guardian</i> (London)	TL <i>Times</i> (London)
CQ	<i>Congressional Quarterly</i> (Weekly Report)	IHT	<i>International Herald Tribune</i>	Tag <i>Tageszeitung</i> (West Berlin)
CR	<i>Congressional Record</i>	Ind	<i>Independent</i> (London)	STel <i>Sunday Telegraph</i> (London)
CW	Chemical warfare	ITP	<i>Inside the Pentagon</i>	SZ <i>Süddeutsche Zeitung</i>
DerS	<i>Der Spiegel</i>	JDW	<i>Jane's Defence Weekly</i>	WP <i>Washington Post</i>
		JPRS	<i>Joint Publications Research</i>	WT <i>Washington Times</i>
				WSJ <i>Wall Street Journal</i>

French Republic to states to participate in a ceremony to sign the Convention in Paris on 13 January 1993, and requests the UN Secretary-General, as Depositary of the Convention, to open it for signature then. The resolution further empowers the Secretary-General to provide services to initiate the work of the Preparatory Commission for the Organization on [sic] the Prohibition of Chemical Weapons.

Not included among the co-sponsors of the resolution are China [see 23 Sep] and Pakistan [see 30 Sep], as well as Egypt and the other Arab League countries [see 25 Sep, 12-18 Oct and 28 Oct].

12 November President Bush notifies the US Congress that he is once again [see 14 Nov 91] extending the state of emergency he had declared in Executive Order No 12735 promulgating new measures against the proliferation of chemical and biological weapons [see 16 Nov 90] so that the measures may continue in force [AP in CN 13 Nov].

13 November In Belgium, the Chamber of Representatives approves BFr 504 million for construction of the Houthulst chemdemil facility [see 21 May]. Completion is now expected in late 1994 or early 1995 {*Het Laatste Nieuws* 13 Nov}.

13 November The bilateral Russian-US talks on chemical weapons in New York [see 9 Oct and see also 2 Nov] come to an end and will resume soon in Geneva. An unidentified US official later tells *Arms Control Reporter* that the verification protocol for the 1990 bilateral destruction agreement still remains unconcluded, and that the two sides have nearly finished preparing the 50-odd different forms they will need to use for their phase-II data exchanges under the 1989 Wyoming Memorandum of Understanding [see 17 Jun].

The forms for declaration of stockpiles and production facilities might, the official also said, be used as models for the declarations required under the CWC {ACR no. 11-92 p. 704.B.544}.

15 November In Cambodia, a clandestine Khmer Rouge radio broadcast alleges that, in ten days time, the government intends to use toxic chemicals against the National Army of Democratic Kampuchea in the Thai border region. {Voice of Cambodia 15 Nov in FBIS-EAS 16 Nov}

16 November The British government informs Parliament of its policy towards the Australia Group now that the CWC is completed: "The Australia Group harmonises national export controls by consensus. It is for each member state to apply its individual controls. The Australia Group (AG) has undertaken [see 6 Aug] to review its work to ensure consistency with the provisions of the chemical weapons convention. AG members, including the United Kingdom, have declared their intention to be early [sic] signatories of the Convention. In this context, the United Kingdom will seek to ensure within the AG and nationally that we maintain effective controls against CBW proliferation." {HansC 16 Nov}

17 November President Yeltsin issues a ukase *On the Introduction of Controls on the Export from the Russian Federation of Pathogens, Their Genetic Variations and Fragments of Genetic Material which Could be Used in the Creation of Bacteriological (Biological) and Toxin Weapons*. It includes a list of 47 particular viruses, rickettsiae and bacteria that cause

human diseases, as well as "genetically altered microorganisms producing" any of 13 listed toxins {*Rossiyskiye Vesti* 5 Dec in FBIS-SOV 10 Dec}. A statute setting out export-control procedures for the listed microbes is approved by the Russian Federation Government three days later {RV 5 Dec in FBIS-SOV 9 Dec}. The list, which does not extend to the toxins themselves or to animal or plant pathogens, had apparently been compiled by the Inter-departmental Commission for Export Control in the light of the draft Australia-Group list [see 2-4 Jun] {MN 13-20 Dec}.

17-20 November The US Army holds its annual Scientific Conference on Chemical Defense Research at Edgewood RDE Center, Aberdeen Proving Ground.

18 November The Council of the Western European Union transmits to the WEU Assembly the first part of its 38th annual report, covering the first seven months of 1992. Its section on the WEU Agency for the Control of Armaments reads: "The Agency...continued its residual tasks as regards the limitation of atomic, biological and chemical weapons at a level of activity corresponding to that obtaining at the time of the 1984 Rome Declaration and in accordance with the procedures approved up to that time. In the first half of the thirty-seventh year of monitoring within WEU, the legal sources used to justify the control levels and procedures have remained unchanged. The number of agreed verifications in 1992 will be the same as for previous years (four in 1990 and 1991). They will take place during the second half of the year" {WEU doc. 1343}.

18-21 November In St Petersburg, Russia, the Institute of Ultrapure Biological Preparations [see 22 Sep] is visited by a team of 16 British and American experts and diplomats at the invitation of, and as part of the investigation ordered by, President Yeltsin recorded in the Joint Statement on Biological Weapons by the Governments of the United Kingdom, the United States and the Russian Federation [see 10-11 Sep]. The investigation is being run by the Presidential Commission on CBW Convention Problems. Commission Deputy Chairman P Syutkin is later quoted by *Izvestiya* as saying that the Institute (founded in 1974), had been "only indirectly connected in the most general way" with biological-weapons work in the former USSR.

The Russian part of the investigation is headed by Academician Sergey Prozorovskiy who says at the end-of-visit news conference that the concern of the British and US sides about the activities of the Institute had been based "on distorted information on the work which was indeed carried out here up to May 1990, involving a vaccine strain of the plague microbe, and in 1992 with the virus of pseudo-plague of birds". He says that the thrust of this research had been very carefully analyzed, establishing that the research had been undertaken in order to create vaccines and not "biological offensive strains of microorganisms, as the West mistakenly believed". The Anglo-American team says nothing about its own conclusions. {ITAR-TASS 21 Nov in BBC-SWB 24 Nov; ITAR-TASS 21 Nov in JPRS-TAC 5 Dec; Radio Moscow 21 Nov in FBIS-SOV 23 Nov; Izv 25 Nov in FBIS-SOV 25 Nov; Pravda 12 Dec in FBIS-SOV 24 Dec}

18 November In Mannheim, Germany, Jürgen Hippenstiel-Imhausen is once again on trial in connection with his CW-

related business dealings in Libya [see 3 Nov], facing a charge this time of defrauding the Federal Research Ministry [see 27 Feb 89] {FAZ 19 Nov}. He is found guilty three weeks later, and his prison sentence is increased from five to six and a half years {FR 10 Dec}.

18 November The British government tells Parliament that it expects the UK's Single Small Scale Facility under the CWC to comprise a small area containing a specialist laboratory and associated storage buildings within the Chemical and Biological Defence Establishment at Porton Down {HansC 18 Nov}.

19 November In Iran, authorities give publicity to military manoeuvres in the desert north of Yazd, which are described as the country's "first comprehensive exercises to counter chemical weapons". Combat, support and logistics battalions engage over 50 square kilometres: "Using their full gear, the participating units broke through the advance enemy lines in the face of chemical bombing by the hypothetical enemy" {Iran First Program Network 19 Nov in FBIS-NES 20 Nov}.

19 November Iraq transmits to the UN Security Council a further report on measures it has taken in implementation of section C of Resolution 687 (1991). The report includes portrayal of each UNSCOM inspection, identifying the inspected sites, and lists all the chemical weapons declared to UNSCOM {S/24829}.

19 November The North Atlantic Assembly, in a resolution adopted on the last day of its 38th session, in Bruges, "urges member Governments and Parliaments of the North Atlantic Alliance...to promote the imposition of international trade, credit and aid sanctions on nations outside the NPT and CWC or which are shown to be in violation of either the NPT or the CWC". {Document AJ 270 STC (92)}

20 November In Croatia, the official Army journal *Hrvatski Vojnik* carries an account of recent work by the Army's first NBC decontamination unit, which had been formally established on 5 November: "One of the most difficult tasks was the decontamination of former JNA barracks. These are very large areas from which the JNA had not managed to evacuate a large amount of grenades with chemical warfare agents, so they had simply dumped them in ditches, etc." No details are given of the chemical agents referred to. {*Hrvatski Vojnik* 20 Nov}

20 November In Angola, government forces have been using chemical weapons in Cabinda, according to a communiqué issued by the Front for the Liberation of the Cabinda Enclave {Radiodifusao Portuguesa 26 Nov in BBC-SWB 27 Nov}

21 November In Moscow, *Izvestiya* publishes a CPSU Central Committee paper from early 1989 about foreign perceptions of Soviet involvement in Ethiopian, Angolan, Iraqi, Syrian, North Korean and Libyan chemical weapons programs. These perceptions had been outlined in a submission from Eduard Shevardnadze in which he observed that the "need therefore arises once again to see whether we are offering any grounds, however trivial, for the accusations against us", and in which he recommended that all the relevant Soviet

organs and ministries "be instructed within a month to analyze thoroughly the state of affairs...and our actions with regard to the countries concerned". The Politburo adopted the recommendation. *Izvestiya* comments on how poorly informed the USSR leadership seems to have been about the true state of affairs regarding the dissemination of Soviet chemical weapons abroad. {Izv 21 Nov in FBIS-SOV 23 Nov}

23 November In Geneva, the Ad Hoc Group of Governmental Experts established by the Third BWC Review Conference convenes for its second session, 'VEREX II', to explore possible verification measures for the treaty [see 16 Jul]. Ambassador Tibor Tóth of Hungary continues in the chair and 46 BWC States Parties participate, with an observer from the World Health Organization. For the three broad areas in which potential verification measures are being examined [see 10 Apr] – development, acquisition or production, and stockpiling or retaining – the three moderators appointed at the first session (respectively, Patrice Binder of France, Åke Bovallius of Sweden, and Roque Monteleone Neto of Brazil) continue to assist the chair and are also requested to conduct informal consultations on particular issues. The session is due to end on 4 December. {BWC/CONF.III/VEREX/4}

23-24 November In Paris, the Coordinating Committee for Multilateral Export Controls (CoCom) holds an unprecedented "informal cooperation forum" to which states subject to the committee's strictures are invited to discuss establishing CoCom-style export-control systems in their own countries and otherwise to demonstrate their qualifications for gaining wider access to CoCom-controlled goods and technology {HansC 7 Dec}. There are delegations from Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czechoslovakia, Estonia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Mongolia, Romania, Russia, Ukraine and Uzbekistan, as well as the more usual participants. In all, 42 countries are represented {DESO (Defence Export Services Organisation) Newsletter February 1993}. The United States announces that it is establishing an export-control assistance fund to which it has already allocated \$11 million, some of it from Nunn-Lugar funds {*MedNews* 23 Nov & 7 Dec}.

23-24 November The United Nations Security Council once again [see 11-12 Mar] receives a high-level Iraqi delegation led by Deputy Prime Minister Tariq Aziz during its deliberations on the continuation of sanctions against Iraq. At the start of the meeting the President states that Iraq had been fulfilling its obligations only selectively and partially; at the close, after Mr Aziz had been heard [see also 19 Nov] and had responded to that and other such statements, the Council calls upon Iraq to comply "fully and unconditionally with its obligations".

UNSCOM Chairman Ekéus tells the Council during the meeting that the "information which Iraq has asserted constitutes a full, final and comprehensive report [on its programs for developing weapons of mass destruction, as required under Resolution 707 (1991)] was found unanimously by the Commission, at its fourth plenary session last month, to be flawed and incomplete" [see 5 Jun and 16 Jul] {S/PV.3139}.

24 November In Cairo, *Al-Sha'b* reports that the United States has recently put "intense pressure" on Egypt to sign the CWC {*Al-Sha'b* 24 Nov in FBIS-NES 1 Dec}.

25 November At the Quaker United Nations Office in Geneva, the Federation of American Scientists and the NGO Committee convenes a panel of non-governmental specialists in BW matters to provide an early-evening briefing for VEREX II experts [see 23 Nov].

27 November In Moscow, representatives of the European Communities, Japan, Russia and the United States sign an agreement to establish the International Science and Technology Center which is to serve as a clearinghouse for developing, approving, financing and monitoring projects aimed at engaging weapons scientists and engineers from the CIS and Georgia in peaceful civilian science and technology activities [see 12 Mar]. The EC are providing ECU 20 million to support the ISTC; Japan, \$17 million; and the United States, \$25 million. ISTC activities are to be directed by a governing board with representatives of member states {US Department of State Dispatch 7 Dec}.

30 November The UN General Assembly adopts without vote its First Committee's resolution [see 12 Nov] commending the Chemical Weapons Convention {A/RES/47/39; AN-NA 2 Dec; SZ 2 Dec}.

In a statement on behalf of states members of the League of Arab States, the representative of Egypt, Ambassador Elaraby, says: "I should like to reaffirm that the Arab States, proceeding from the requirements of their national security and their common national interests, cannot deal, under the present circumstances, with the draft Convention on chemical weapons in isolation from the other international efforts aimed at the elimination of the other weapons of mass destruction such as the Non-Proliferation Treaty, the IAEA international safeguards and inspection regime and the provision of credible international guarantees. Despite all this, the Arab States will not pose an obstacle to the adoption of the draft Convention by the General Assembly. If the draft had been put to a vote the Arab States would have abstained" {A/47/PV.74}.

The representative of the United States, Ambassador Watson, says: "Let me point out one further reason for all States - even those with concerns about some parts of the Convention - to sign it in January. Only by signing the Convention early can a country gain the right to participate in the Preparatory Commission and thereby play a role in the development of the Convention's operating procedures in the establishment of the Organization for the Prohibition of Chemical Weapons" {A/47/PV.74}.

2 December In Geneva, what at the UN General Assembly in New York had been the Cosponsors Group [see 9 Nov] reconvenes, still under the chairmanship of Ambassador von Wagner of Germany, to continue work on the CWC Preparatory Commission and related matters. Japan distributes a paper on domestic implementation of the treaty. Australia later distributes two further papers, one dated 6 December on the scheduling of Commission plenary sessions during 1993, and the other, on 8 December, setting out a proposed work program for the first three months of the Commission.

2 December In Russia, General Valentin Yevstigneyev [see 17 Apr and 10-11 Sep] speaks in a press interview about the BW programs which used to be run by the little-known 15th administration of the General Staff, which formerly he head-

ed. On BW weapons: "At times we have reproduced some of them in order to conduct a military-technical evaluation. Before the Convention was signed we studied how we could use our delivery equipment and load it with special loads. We called them mockups for biological agents. No special stocks were created.... The offensive program did not require a large amount of money - after all, it was not an accumulation of arms but a series of research projects." He says that there were once 6500 people working in the system as a whole, but now that number has been cut in half.

He speaks of the St Petersburg institute which Vladimir Pasechnik had once directed [see 18-21 Nov]: "Although his organization did not have direct assignments from the Ministry of Defense, certain work that interested us was being conducted there. In particular, they had received an assignment on transferring the genetic equivalent of the protein myelin into a microorganism. This protein plays the role of insulating the nerve fibre. We were disturbed about significant work in this field abroad, particularly in Great Britain. We were afraid that if the microorganism were modified in that way it could affect the normal program for synthesis of myelin in the organism, which would ultimately lead to flaccid paralysis. We decided to test to see if such a modification were possible. The director at the time knew where this assignment had come from." {NG 2 Dec in JPRS-TAC 30 Dec}

2 December The *Washington Times* reports that the Russian government has been privately supplying the US government with conflicting official information about past biological-weapons programs: "Mr Yeltsin provided confidential information to President Bush in September to correct an earlier omission about Russia's mycotoxin weapons, said officials who spoke on the condition of anonymity.... According to the data, the Russians never worked on mycotoxin arms, the officials said. But the same data submission said mycotoxins... were studied and rejected by the military as impractical." {WT 2 Dec}

3 December In China, at the weekly Foreign Ministry press briefing, spokesman Li Jianying states that China is "conducting a serious study" on whether to sign the CWC, the purposes and objectives of which it supports [see 12 Nov]. {Xinhua 3 Dec in FBIS-CHI 3 Dec}

A fortnight later, Foreign Minister Qian Qichen announces that China will indeed sign. {Xinhua 16 Dec in FBIS-CHI 16 Dec}

3 December In Moscow, *Izvestiya* carries an article by Dr Lev Fedorov [see 22 Oct] in which he says that, according to official figures (he does not say which country's or whose) Russia possesses 323,000 tonnes of organophosphorus nerve agents alone.

The article also states that tens of thousands of tonnes of mustard gas made at Chapayevsk and Dzerzhinsk during and after World War II have apparently disappeared, though a record exists of 1200 tonnes having been buried near Chapayevsk. And the article refers to 2500-3000 railcar-loads of aircraft bombs filled with lewisite having been dumped in the Arctic Ocean {Izv 3 Dec in FBIS-SOV 11 Dec}.

4 December In Geneva, the second session of VEREX, the group of governmental experts studying potential BWC verification measures [see 23 Nov], comes to an end, only part

way through its agenda. In its end-of-session summary report, the Group observes that additional efforts are required to prepare its future work: it envisages a broad range of intersessional activities prior to 24 May 1993, the date agreed for commencement of its third session {BWC/CONF. III/VEREX/4}.

Working papers had been submitted to VEREX II by several national delegations, 38 papers in all, as well as 26 background papers and non-papers. Much of the substantive work of the session had been done by a small group of individual experts, each of whom had been assigned particular potential verification measures. These experts were tasked to introduce and moderate discussion on the measures assigned to them and then to summarize, as rapporteurs acting in their personal capacities, what transpired. The expectation is that these rapporteurs will continue to work on their summaries during the intersessional period, developing them into "informal introductory papers" in time for VEREX III. The three moderators [see 23 Nov] also are expected to prepare such papers "to facilitate the evaluation of the measures". The rapporteurs and the measures assigned to them were as follows -- *Max Gevers* (Netherlands): Surveillance of publications, Surveillance of legislation, Data on transfers and transfer requests and on production, Multilateral information sharing; *Ashok Kapur* (India): Declarations; International arrangements; *Annabelle Duncan* (Australia): Notifications; *Gordon Vachon* (Canada): Surveillance by satellite; Surveillance by aircraft; *Volker Beck* (Germany): Ground-based surveillance; *Åke Bovallius* (Sweden): Sampling and identification, off-site, Identification of key equipment; *A A Mohammadi* (Iran): Observation, Interviewing, Visual inspection; *David Arnold-Forster* (UK): Auditing, off-site, Auditing, on-site; *Patrice Binder* (France): Sampling and identification, on-site; *Marian Negut* (Romania): Medical examination; *Roque Monteleone Neto* (Brazil): Continuous monitoring by instruments, Continuous monitoring by personnel.

4 December The Middle East Peace Process Steering Group concludes a two-day meeting in London in preparation for the 8th round of bilaterals expected to start next week in Washington. The Steering Group has been reviewing progress in each of the five working groups, including the one on Arms Control and Regional Security [see 11-14 May], the next session of which is now scheduled for February 1993, in Washington {US Department of State Dispatch 14 Dec}.

5 December In Iraq, a team of 27 UN inspectors, UNSCOM 47, led by Johan Santesson of the World Health Organization arrives to conduct a series of short-notice visits at chemical and biological facilities and other civilian and military sites. Four days into the visit, during a meeting between Chief Inspector Santesson and Lt-Gen Amer Rashid of the Iraqi Military Industries Commission, the latter, according to the former's subsequent report {S/24985*}, says that UNSCOM will "get nothing more, nothing" and that, if his subordinates provide anything beyond technical answers, he will "break their backs". General Amer is also reported to have said that he would break the neck of any Iraqi who provided UNSCOM with the names of people involved in the weapons of mass destruction program. The report is later described by the Iraqi government as imprecise {S/25064}.

7 December The British government informs Parliament of

its interpretation of the provisions of the CWC regarding disabling chemicals: "Under the terms of the Convention, states parties will be entitled to use toxic chemicals for law enforcement, including domestic riot control purposes, provided that such chemicals are limited to those not listed in the schedules to the Convention and which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure." [See also 23 Jul] {HansC 7 Dec}

7-10 December The Australia Group meets in plenary session in Paris. It agrees on measures to control the export of biological agents and dual-use equipments which could be used in the production of biological weapons [see 21 May and 2-4 Jun]. To this end the Group adopts a list of human pathogens consisting of 37 microbes and 10 toxins, and also a list of animal pathogens consisting of 16 microbes; both lists include associated genetically modified items as well. The Group also adopts a biological equipment list consisting of seven types of item. Besides these control lists, the Group has also been developing "industry awareness" lists of plant pathogens (15 microbes) and additional human pathogens (17 microbes and toxins). [See also 14 Sep and 17 Nov] {GAO/NSIAD-93-113}

The Group also agrees on a "framework paper" for effective licensing arrangements for CBW export controls.

The Group considers expanding future participation to include more states that produce, export or transship chemicals or biologicals. It agrees to invite Argentina and Hungary to participate in addition to the 22 states plus the European Commission that already do.

Participants agree to make the policies of the Group more transparent and open. They discuss additional means of harmonizing and strengthening their control policies and practices consistent with the provisions of the CWC, in which regard they say in their press release on the meeting: "The participants in the Group agreed there was a continuing role for the Australia Group in the harmonization of national non-proliferation controls over CBW-related materials. They recognized that the work of the Group would need to take fully into account the entry into force of the Convention and its implementation and reaffirmed the commitment embodied in the statement made on their behalf by the Representative of Australia to the Conference on Disarmament on 6 August 1992 [q.v.]. Further on, the press release says: "Participants look forward to sharing with other signatories [of the CWC], and later States Parties, their experience in monitoring chemical transfers". {Press Release 11 Dec}

8 December The Moscow weekly *Novoye Vremya* publishes a long article describing the experiences of Andrey Zheleznyakov, formerly a test engineer at GSNIIOKhT [see 16 Sep], the CW research institute in Moscow where, reportedly, he had been accidentally exposed to 'Novichok-5', one of the still-secret chemicals under study in the 'Foliant' CW-agent development program [see 18 Oct]. The article states that experiments with binary chemical weapons based on a "completely new type" of nerve gas first synthesized by Soviet chemists in the late 1970s had commenced at the institute in 1982. The work had been frozen after Zheleznyakov's accident in 1987, but was resumed a year later and, he says, still continues [see also 22 Oct]. Miosis (though not bronchoconstriction) and an almost extinguished blood cho-

linesterase level were among the reported symptoms and signs following his exposures to the chemical (NV no. 50 in FBIS-SOV 16 Dec; *New Times International* January 1993).

9 December In Bosnia-Herzegovina, Serbian forces fire five "chemically charged missiles" on Velesici, part of the Centar municipality near Sarajevo, according to Croatian Radio (BBC-SWB 11 Dec).

14 December In Iraq, the UNSCOM 47 combined chemical and biological inspection [see 5 Dec] comes to an end. Chief Inspector Santesson later tells reporters that Iraq has continued to withhold data on its production of CBW weapons and refuses to admit having used chemical weapons during its war with Iran (DPA 14 Dec in CN 15 Dec; BG & FT 15 Dec).

14 December In Iran, a seminar in Tehran on the effects of CBW weapons on the environment, mankind and society, reportedly attended by 700 scientists, officials and political figures, is opened with a message from President Hashemi-Rafsanjani. *Inter alia*, the message states that at least 207 industrial and commercial firms from 21 advanced countries had participated in the chemical weapons programs of Iraq (Voice of Iran 14 Dec in FBIS-NES 15 Dec).

14 December In Budapest, the Hungarian Ministry of Foreign Affairs convenes an intergovernmental seminar on CBW-weapons nonproliferation by way of follow-up to the 1991 seminar in Paris [see 10-12 Dec 91]. The aim is an informal exchange of views on the state of CBW proliferation and on counterproliferation efforts, including export controls on dual-use chemical and biological materials, equipment and technology, with due attention to the CWC.

15 December The Director of US Central Intelligence, Robert Gates, addresses audiences in California on the subject of weapons proliferation. He states that half of the countries of the Middle East "have nuclear, chemical or biological weapons programs, at least in development". He gives particulars, including:

"Iran has an active chemical weapons program... [It] has produced at least several hundred tons of blister, choking and blood agents - and possibly as much as 2000 tons - at a steadily increasing rate since 1984....

"Despite the damage to Iraq's weapons infrastructure, without sanctions and monitoring, Iraq could restart limited chemical and biological weapon production virtually overnight; a militarily significant amount of biological weapons could be produced in a matter of weeks, and new chemical weapons production could begin in less than one year....

"Despite international outcries, Libya's chemical weapons program continues. We estimate that the production facility at Rabta has produced and stockpiled as many as 100 tons of chemical agents [see also 22 Jan]. Rabta is the largest single integrated CW production plant in the Third World.... We have a number of reports that Libya is constructing another chemical weapons facility [see 10 Apr 91]...."

16-17 December In Geneva, the Swedish CD delegation convenes an international workshop on Investigations of Alleged Use of Chemical Weapons. Its purpose is to identify what the OPCW will need in order that its Technical Secretari-

at be capable of investigating use-allegations as soon as it comes into being: technical expertise, training requirements, equipment and advance organizational preparations. Accordingly, there are detailed presentations from people who had been involved in investigations of all the major use-allegations of the past decade, including the Yellow Rain affair and the CW reports from the Iraq-Iran War and from Angola, Mozambique and Azerbaijan. UNSCOM experience in Iraq is also covered. (CWC no. 18, p. 22)

18 December In the United States, an interim rule issued by the Commerce Department Bureau of Export Administration comes into force adding the four new chemicals on the Australia Group precursor control list [see 2-4 Jun] to the relevant entry in its Commodity Control List, ECCN 1C60C. The rule also revises ECCN 1C61B by extending its list of controlled microorganisms and toxins to include 25 microbes pathogenic to plants and animals, also in accordance with agreement reached at the June 1992 Australia Group meeting. Comments on the interim rule are due by 19 January 1993 [see also 14 Sep] (FedR 18 Dec). All ten of the toxins and all but one (Lyssa virus) of the 53 microbes on the Australia-Group core list of biological agents for export control [see 7-10 Dec] are now on the Commodity Control List. The ten toxins do not include any trichothecene mycotoxins.

19 December In Moscow, *Pravda* publishes an interview with Aleksandr Gorbovskiy of the Presidential Commission on CBW Convention Problems, the general thrust of which is to ridicule Dr Lev Fedorov [see 3 Dec] and the information he has been publishing about the chemical weapons of the former Soviet Union.

In regard to the statement by Fedorov that several different chemical agents had been used by Soviet forces in Tbilisi [see 9 Apr 89], Gorbovskiy says: "I was involved in evaluating the events in Tbilisi as an investigation expert, and I officially declare that those reports are false. The Ministry of Internal Affairs Troops used two substances at the time: chloroacetophenone and CS, which are used throughout the world to combat disturbances" (Pravda 19 Dec in FBIS-SOV 23 Dec).

21 December The Russian government approves the agreement on technical and financial aid for its chemdemil program concluded with Germany the week previously during the visit of Chancellor Kohl to Moscow. [See also 9 Nov] (FR 22 Dec; Interfax 29 Jan in FBIS-SOV 29 Jan)

21 December *Middle East Defense News*, the Paris-based fortnightly, reports on new approaches on counterproliferation export controls said to be under study by US officials as possible alternatives or supplements for the existing list-driven system. The article includes this: "the United States is likely to bring violators of international arms control agreements, such as the [CWC], to book before the United Nations Security Council. 'When confronted with a flagrant violation', one DoD analyst proposed, 'we should declassify a few thousand pages of documents on their weapons programs and make it public, so they can no longer deny that these programs exist'. Other suggestions currently being aired include covert action to disrupt procurement networks, and a variety of measures to punish supplying companies that continue to defy international proliferation controls." (MedNews 21 Dec)

21 December In Brussels, the EC General Affairs Council adopts a statement on transitional control measures for dual-use goods and technologies. The twelve member states of the European Community now envisage adopting an EC regulation by 31 March 1993 – i.e. three months after intracommunity trade no longer becomes subject to controls at internal borders {AN-NA 30 Dec}. The export-control regulation is expected to be based on a single unified list of dual-use technologies, including the items currently on the Australia-Group lists {MedNews 23 Nov}.

25 December In the United States, former Congressman Richard H Ichord dies. Ichord was the last chairman of the House Un-American Activities Committee and, during the final years of the Carter administration, the leading advocate of American CW rearmament.

26 December Egyptian Foreign Minister 'Amr Musa, in an interview published today, reaffirms his country's proposal for establishing a Middle East free of weapons of mass destruction [see 16 Apr 90], continuing: "Today, there is a chemical weapons agreement we would like to join. But if we do, we will be members to both the Nuclear Nonproliferation Treaty and the chemical nonproliferation agreement, while Israel will be outside both.... We will not sign the chemical weapons agreement, but not because we are not convinced it is needed. On the contrary, we are convinced. Indeed, we participated in drafting the agreement. But we took an Arab decision [see 12 Sep] not to attend the meeting scheduled in Paris on 13 January to sign the agreement.... I hope that the Arab position will remain united to safeguard the security balance in the Middle East." {Al-Ahram Press Agency 26 Dec in FBIS-NES 28 Dec}

27 December In Bosnia-Herzegovina, chemical weapons are used in the latest Serbian attacks on the Brcko front, according to Croatian Radio. [See also 9 Dec] {BBC-SWB 29 Dec}

28 December In Japan, the Ministry of International Trade and Industry announces that new export controls will shortly come into force on biological agents and dual-use biological equipment. {Kyodo 28 Dec in BBC-SWB 31 Dec}

28 December The US General Accounting Office releases a study it had been preparing for Senator Gore since October 1991, *US and International Efforts to Ban Biological Weapons*. The study depicts failures of effectiveness of the Biological Weapons Convention and addresses BW counterproliferation export controls including Australia-Group actions. Also, based on information gathered by the GAO during an overseas visit, it describes attitudes of foreign governments towards developing a verification regime for the BWC, such as the US administration is currently opposing. The study explores the reasons given for this opposition. The recommendations put forward are principally of an administrative nature. {GAO/NSIAD-93-113}

29 December Russia, in a Foreign Ministry statement, announces its intention of participating in the CWC signing ceremony in Paris during 13-15 January [see 24 Aug]. {Interfax 29 Dec in FBIS-SOV 30 Dec}

29 December In Liberia, the international peacekeeping

force command announces that the NPFL is reported to have acquired chemical weapons [see also 8 Nov]. ECOMOG field commander General Adetunji Olurin, speaking at a news conference, warns of grave consequences if any such weapons are used in Liberia {Radio ELBC (Monrovia) 7 Jan in FBIS-AFR 30 Dec}. Russian diplomats accredited to Côte d'Ivoire are later said to have held talks with the NPFL about the sale of, among other things, chemical weapons {Radio ELBC (Monrovia) 7 Jan 93 in BBC-SWB 8 Jan 93}.

29 December An official Iraqi document written in August 1986 apparently referring to available stocks of biological weapons is published by Human Rights Watch in New York and publicized further by the *New York Times*, which quotes unidentified CIA and DIA intelligence analysts as being confident of the authenticity of the document {NYT 30 Dec; NYT Magazine 3 Jan}. Human Rights Watch states that the document, which it had obtained from a senior representative of the Kurdish Democratic Party, had been among papers captured during a *peshmerga* raid on government offices in northwestern Iraq during 1987 {Human Rights Watch letter to UNSCOM Chairman 29 Dec}.

30 December In the United Kingdom, an official history is published of the defence establishments at Porton Down, marking 75 years of CBW research there. Previous histories have been unavailable in the open literature.

This relatively brief volume contains much hitherto unpublished information – such as the fact that total UK production of CW agents during World War II was 55,700 tonnes, some three-quarters of which was mustard gas, and the particulars given of the open-sea trials of bacterial and viral BW agents conducted during 1948-55.

The volume also recounts various false alarms of CBW attack on Britain during World War II, including an episode in the autumn of 1940 when Germany was widely supposed to have released vesicant threads or cobwebs into the air over the UK [see also 20 Oct]. Recalling the observations of similar unusual concentrations of airborne gossamer in September 1741 recorded by the naturalist Gilbert White, Porton investigators had soon shown the spider threads to be a harmless natural phenomenon. {75 Years of Chemical and Biological Research}

31 December In the UK, new export-control legislation is introduced applicable to listed microbes, toxins and dual-use biological equipment. A total of 37 microbes pathogenic to man, 10 toxins and 16 animal pathogens are listed, as well as counterpart genetically modified organisms and nucleic acid sequences associated with their pathogenicity {Statutory Instruments 1992, Customs and Excise, *The Export of Goods (Control) Order 1992*, 31 Dec}. The lists exactly follow the new Australia-Group biological control lists [see 7-10 Dec], though they differ somewhat from, for example, the new Russian [see 17 Nov] and US [see 18 Dec] lists. In respect of certain other microbes, toxins and equipments, the government is issuing warning guidelines in a *BW Awareness Raising Booklet*.

1 January 1993 In Angola, government aircraft repeatedly drop chemical bombs on the city of Ndalatando in Cuanza Norte Province, killing civilians, according to UNITA {Voice of the Resistance of the Black Cockerel 1 & 6 Jan in FBIS-AFR

4 & 6 Jan}. Later UNITA alleges that women and children have been killed by poisonous gas bombs dropped by Angolan aircraft during fighting in Huambo {Radio South Africa 14 Jan in FBIS-AFR 15 Jan; Voice of the Resistance of the Black Cockerel 16 Jan in BBC-SWB 18 Jan; FR 18 Jan}.

2 January On Johnston Atoll in the Pacific, fire breaks out in a containment area of the US Army chemdemil facility there. There are no injuries. The disposal plant is shut down and will remain so until an investigation by inspectors sent out from the US Army Chemical Materiel Destruction Agency has been completed {WP 4 Jan}, probably in February {Star (Alabama) 12 Jan}.

The JACADS facility is currently in the fourth and final phase of its Operational Verification Test [see 31 Mar 92], this phase testing the disposal of mustard-filled projectiles; it began in October 1992 and had been scheduled to end in late January {Chemical Demilitarization Update January}.

5 January In Washington, the Policy Coordinating Committee on technology transfers, an interagency body, meets to resolve two export-licensing disputes, one of them concerning the sale to Iran of ten crop-dusting aircraft thought by some officials, though not by others, to have application in chemical warfare. The matter is not resolved. However, White House spokesman Marlin Fitzwater announces a separate and earlier decision by the Bush administration not to grant an export licence to BP Chemical for the sale to Iran of a \$250 million acrylonitrile factory, apparently on the grounds that the production of hydrogen cyanide involved could be diverted to chemical-warfare purposes. {NYT & WP 5 Jan}

5 January The US Defense Department submits a report to the Congress on what had been done, by October 1992, with the Nunn-Lugar funds that had been appropriated in November 1991 [see 25 Nov 91] for aiding the destruction of former Soviet chemical and nuclear weapons. Only \$12.9 million of the Fiscal Year 1992 appropriation [see also 1 Oct 92] of \$400 million had actually been spent; it included \$1.5 million of the \$25 million thus far pledged for chemdemil effort [see 9 Nov 92]. {DW 16 Feb}

6 January In Washington, the Department of Veterans Affairs releases a study commissioned from the National Academy of Sciences on the long-term health effects of tests with mustard gas and lewisite carried out on more than 60,000 US military personnel during World War II {Veterans at Risk}. The study, conducted by a panel of the National Institute of Medicine, found a causal link between poison-gas exposure and such diseases as respiratory and skin cancers, chronic respiratory illnesses, chronic conjunctivitis and psychological and sexual disorders. The panel had been impeded by the secretiveness of some of the military agencies involved and recommended further studies {WP 7 Jan; New Scientist 16 Jan; Bulletin of the Atomic Scientists March}. The Department has now begun a recommended epidemiological study {C&EN 11 Jan}.

8 January Iraq bars UN aircraft carrying UNSCOM personnel from entry into the country {AFP 8 Jan in FBIS-NES 11 Jan}. About 70 UN people, including a 30-member UNSCOM chemical destruction team on its way to al-Muthanna [see 4-9 Nov 92], are now stranded in Bahrain {DTel 11 Jan; WP 13 Jan}.

The UN Security Council warns Iraq of "serious consequences." {S/PV.3161}

9 January In Moscow, the Director of GSNIIOKhT [see 8 Dec 92], Viktor Petrunin, is reported in *Pravda* as "officially" stating: "the GSNIIOKhT today does not work on problems having anything to do with the production of chemical weapons. Moreover, our institute is participating actively in the preparation of the Convention banning them." {Pravda 9 Jan in JPRS-TAC 16 Feb}

11 January The Japanese government announces that it will be dispatching a team to draw up an inventory of chemical weapons left in China by the former Japanese Imperial Army. Japanese Foreign Ministry experts had been in China for preliminary investigations on two occasions during 1991 [see 4 Nov 91]. {Kyodo 11 Jan in FBIS-EAS 11 Jan}

11 January In Cairo there is a meeting of 21 members of the League of Arab States. Egypt, citing continuing Israeli nonparticipation in the nuclear-weapons Non-Proliferation Treaty, had sought continued solidarity for an Arab stand against the CWC at the Paris signature ceremony in two days time [see 26 Dec 92], but, according to League Secretary-General Esmat Abdel Meguid after the meeting, some Arab states will sign, although most have chosen to wait {Al-Ahram Press Agency 3 Jan in FBIS-NES 4 Jan; FT 13 Jan; CN 13 Jan}.

The presidents of Egypt and Syria hold talks in Damascus two days later. Speaking at a news conference afterwards, they both declare themselves unable to sign a treaty that would ban chemical weapons but overlook nuclear weapons {Egyptian Space Channel 13 Jan in BBC-SWB 15 Jan}.

12 January In Moscow, the Army newspaper *Krasnaya Zvezda* reports two new complications in the Russian chemdemil program [see 21 Dec 92]. The chairman of the Chuvash Supreme Soviet has signed a decree banning the destruction of chemical weapons on Chuvash territory (for example at Novocheboksarsk [see 26 Oct 92]) or the siting of chemdemil facilities. And, in the Udmurt Republic, the Kambarskiy Rayon Soviet has appealed to the Kuntsevich Commission to postpone the program. {KZ 12 Jan in FBIS-SOV 13 Jan}

13 January In Tokyo, the government announces its intention to institute domestic implementing legislation for the CWC in time for ratification of the treaty in 1995. The legislation will enable international inspections of chemical factories; require regular data-reporting from chemical firms, including manufacturers of agricultural chemicals and semiconductors; and include chemical trade and export control provisions.

Government sources say that about a thousand factories in Japan will become liable to international inspection under the CWC {Kyodo 13 Jan in FBIS-EAS 13 Jan}.

13 January The government of the Lao People's Democratic Republic, through a Foreign Ministry statement, expresses support for the CWC and regret at being unable to participate in the Paris signing ceremony, and announces that "we are currently speeding up the resolution of certain regulations so that we are able to become a signatory of the treaty in the future". The statement also says: "the LPDR Government

officially reaffirms its stand that in the past as well as in the present we have never had any chemical weapons in our possession nor have we ever used such a dangerous arsenal." (Vithayou Hengsat radio 13 Jan in FBIS-EAS 13 Jan)

13-15 January In Paris, at a ceremony hosted by the French government, the UN Secretary-General opens the Chemical Weapons Convention for signature, and 130 states (out of more than 150 participating). They approve without vote a resolution establishing the OPCW Preparatory Commission, to which is annexed the *Text on the Establishment of a Preparatory Commission* which the CD had adopted at its 1992 session.

President Mitterrand, during his address to participants, says: "Let everyone here be convinced that the struggle against the dissemination of weapons is a great political and moral cause for the world. It is not a confrontation between North and South...between supplier and importer countries, between industrialized nations and states seeking to become so, it is the fight of all of us for the security of each. And the United Nations has to be the guarantor."

Many of the states signing the CWC also make statements. Some (e.g. the Australian, Belgian, German, Japanese and Swedish statements) include specific promises regarding the financing of the Preparatory Commission. The Netherlands announces its intention of withdrawing its retaliatory-use reservation to the 1925 Geneva Protocol. Estonia and the Slovak Republic for the first time make public declarations of nonpossession of chemical weapons. Croatia states that chemical weapons have been used against it and against Bosnia-Herzegovina. Ethiopia speaks of the use of chemical weapons by the defunct Dergue regime. The United States urges "the members of the Arab League to seize this opportunity and sign the Chemical Weapons Convention", continuing: "Doing so would be a step towards, and not away from, making the Middle East a zone free of all weapons of mass destruction, as called for by President Mubarak of Egypt" [see 26 Dec 92 and 11 Jan].

The signatory states include four members of the Arab League: Algeria, Mauritania, Morocco and Tunisia. There had been some expectation in the US press of others signing as well, Jordan, Kuwait, Lebanon, Libya, Oman and Yemen being mentioned (NYT & WP 14 Jan; Reuter in *Moscow Times* 15 Jan); the other Gulf states, and Saudi Arabia too, had also raised expectations (ASA Newsletter 10 Feb). Algeria, in its statement, reaffirms its adherence to League resolution 5232 of September 1992 on the creation in the Middle East of a zone free of weapons of mass destruction. Israel, whose Foreign Minister, Shimon Peres, signs the treaty, "suggests to all countries of the region to construct a mutually verifiable zone, free of surface-to-surface missiles and of chemical, biological and nuclear weapons". The Israeli statement goes on to list measures needed to establish regional security, amongst them the need "to ensure compliance with arms control accords" and "to install mutual challenge inspections once peace has been established and endured the test of time". The statement later says: "We propose to our neighbors to jointly formulate appropriate mechanisms for inspection".

13-19 January American, British and French aircraft bomb targets in Iraq (just as the CWC signing ceremony in Paris begins). The Iraqi UN ambassador announces that Iraq will

revoke its ban on UNSCOM landing its aircraft on Iraqi territory [see 8 Jan] (DTel 14 Jan). The UN subsequently rejects the conditions later attached by Iraq to the lifting of the ban (FT & IHT 16-17 Jan). The United States launches a cruise-missile attack on the Zaafaraniyah industrial complex near Baghdad, reportedly a nuclear-weapons-related facility (DTel 18 Jan; *MedNews* 25 Jan), and there are further Anglo-Franco-US air raids in both northern and southern Iraq. The Arab League urges restraint (IHT 19 Jan). Iraq offers a ceasefire and, if it is implemented, unrestricted landing rights for UNSCOM aircraft (FT 20 Jan).

14 January In Washington, 93 specialists comprising the Ad Hoc Working Group on Non-Proliferation and Arms Control publish a set of papers that "highlight some of the major issues in these areas that will confront the Clinton Administration during its first six months in office". Included are five papers on CBW issues, with analysis and policy recommendations on how best to secure US ratification of the CWC, on promoting Middle Eastern participation in the CWC, on stimulating the Russian chemdemil program, on the future of the Australia Group, and on strengthening the Biological Weapons Convention.

14 January In the United States, the National Research Council delivers to the Army the report on its review and evaluation of the Army Chemical Stockpile Disposal Program. The report concludes that efforts by the Army to assess the risks of destroying chemical weapons fall short of what is needed, observing that there is much to be learnt from the nuclear power industry, which faces similar environmental and community concerns. The report recommends that the Army performs a site-specific full-scope scenario-based risk assessment for each of the planned chemdemil facilities in the United States, instead of relying on its Final Programmatic Environmental Impact Statement. (ITP 28 Jan)

15 January In Papua New Guinea, government troops are using mortar bombs containing poisonous chemicals against villages on Bougainville Island, according to a broadcast by the secessionist Bougainville Revolutionary Army (Radio Australia 15 Jan in BBC-SWB 16 Jan).

15 January In Poland, the chief of the chemical defense forces, Colonel Sygmund Yasik, has announced that Poland does not possess chemical weapons and that no traces have been found on Polish territory of any such weapons belonging to the forces of the former Soviet Union [see also 6 Aug 91], so the Moscow newspaper *Krasnaya Zvezda* reports. Colonel Yasik had stated, however, that mustard gas had been produced in Poland after World War II in small quantities "for training purposes", production which had stopped several years ago. (ITAR-TASS in KZ 15 Jan)

16 January In the US Senate, action on the CWC is likely to be delayed for at least several months, according to *Congressional Quarterly Weekly Report*, one reason being the preoccupation of the Foreign Relations Committee with the bilateral START 2 treaty which Presidents Bush and Yeltsin signed on 3 January. (CQ 16 Jan)

18 January In Bosnia-Herzegovina, Muslim forces use "poison gas" in an attack on Serbian-held Iliđa, a suburb of

Sarajevo, according to Tanjug. [See also 19 Sep 92] [BBC-SWB 20 Jan]

18 January In Mannheim, Germany, the trial of Andreas Böhm, former president of the engineering firm Salzgitter Industriebau GmbH [see 3 Nov 92] comes to an end with his conviction and jailing for 15 months, plus a fine of 100 000 DM. He is the sixth German to be imprisoned for involvement in the Libyan chemical-weapons program [DTel 19 Jan; FAZ 20 Jan].

19 January In Skopje, Macedonian Serbs announce their intention of filing charges against the Minister of Internal Affairs and a police commander, alleging that police had used firearms and chemical weapons to attack and heavily injure unarmed Serb youths gathered at a New Year's Eve party in the village of Kuceviste [Tanjug 19 Jan in BBC-SWB 21 Jan].

19 January In the Russian Parliament, during hearings on the draft of phase one of the *Comprehensive Program for the Phased Elimination of Chemical Weapons in the Russian Federation*, Academician Kuntsevich, chairman of the Presidential Commission on CBW Convention Problems, states that Russia may have to spend about \$500 million in connection with the international inspections envisaged in the CWC. This, he says, is because payment for the activity of international inspectors, at between \$400 and \$2000 per day, is to be made by the country on whose territory they work. He says, too, that he had suggested to the Russian Foreign Ministry that a solution to this problem be found before parliament convenes to ratify the treaty.

As for the *Comprehensive Program* itself, which now includes four rather than three destruction plants [see 26 Oct 92], other testimony given at the hearings refers to the growth of strong regional opposition, notably in Chuvashiya [see 12 Jan], Tatarstan [see 5 Mar 92] and other Volga republics, to the transportation of chemical weapons from their existing storage sites to distant chemdemil facilities. The Supreme Soviet thereafter rejects the plan as unpragmatic [Interfax 19 Jan in FBIS-SOV 22 Jan; ITP 28 Jan].

Outside the hearings, environmental activist Lev Fedorov [see 3 Dec 92] states in a press interview that the chemical weapons should be destroyed where they are stored, saying that the major stockpiles are in the Kurganski, Penzenski, Kirovski, Saratovski and Bryanski oblasts, with two others in Udmurtia. He also maintains that the chemdemil program should not be restricted to the job of destroying the 40,000 tonnes of CW agents currently held in storage, but should extend too to the remains of older stocks: "In the history of the Soviet Union, from 500,000 to one million tonnes of chemical weapons were manufactured, which, at the end of their useful life, were buried or burned" or dumped into the oceans [Interfax 9 Jan 93 in FBIS-SOV 22 Jan]. He refers to 12 ocean burial sites: three in the Baltic and the others in the Arctic Ocean and the Pacific [Interfax 19 Jan in BBC-SWB 22 Jan]. The last remaining holdings of adamsite (the arsenical irritant agent) had been buried in late summer 1992, he states in an article in today's *Nezavisimaya Gazeta* [NG 19 Jan in JPRS-TAC 16 Feb].

19 January Bilateral US/Russian talks on chemical weapons resume [see 13 Nov 92] in Geneva. According to a US official quoted by *Arms Control Reporter*, the two sides plan to

meet for two weeks, then go to Russia for a previously postponed visit to a CW facility there, and then reconvene for a further week in Geneva, by which time the outstanding details should have been resolved [ACR no. 1-93 p. 704.B.545].

19 January In the United States during his final day in office, President Bush transmits to the Congress his statutory annual reports on *Adherence to and Compliance with Arms Control Agreements* [see 24 Jun 92] and *Soviet Noncompliance with Arms Control Agreements* [see 9 Apr 92], this year conflated into a single report prepared by the US Arms Control and Disarmament Agency.

As regards the United States, the only suggestion of non-compliance recorded in the unclassified version of the report is that, in September 1992, "the Russians informally raised questions concerning US implementation of the BWC"; these the US "is reviewing".

As regards other countries, the report says the following: "The United States has determined that the Russian offensive biological warfare program, inherited from the Soviet Union, violated the Biological Weapons Convention through at least March 1992. The Soviet offensive BW program was massive, and included production, weaponization, and stockpiling. The status of the program since that time remains unclear. Despite the inadequate BWC declaration [see 31 Aug 92 and 10-11 Sep 92] and continued leadership by 'old hands' of BW arms control negotiations and the BW defensive program, there has also been a marked increase in co-operation from President Yeltsin and other members of the Russian leadership to attempt to resolve compliance issues. We are now engaged in an effort to work with the Russian leadership to help terminate the illegal program and to pursue a number of measures to build confidence in Russian compliance with the BWC.

"Concerning other nations' compliance with the BWC, the United States concludes that Iraq has developed and produced biological warfare agents and weapons. It is likely that these agents and weapons were stockpiled. The United States believes that it is highly probable that China has not eliminated its BW program since becoming a party to the Convention in 1984. Based on the evidence to date, it is highly probable that Syria [not a party to the BWC] is developing a biological warfare agent. The United States has determined that Iran probably has produced biological warfare agents and apparently has weaponized a small quantity of those agents. The United States believes that Egypt [not a party to the BWC] had a program in 1972. It is likely that the Egyptian capability to conduct biological warfare continues to exist. There is some evidence to indicate that Taiwan may continue to maintain the BW program it was assessed as possessing in the 1970s. While there are indications of BW programs in Libya, the evidence is insufficient at this time to reach a firm conclusion regarding the status of such a program." The report makes no comment on the compliance of North Korea with the BWC [see 19 Sep 88].

20 January In Bosnia-Herzegovina, Chief of the Army General Staff Sefer Halilovic lodges a protest with UNPROFOR, and with the peace negotiators Cyrus Vance and David Owen, about enemy use of poison gas on three occasions in the vicinity of Doboj and in Dobrinja (Sarajevo). [See also 27 Dec 92] [Radio Bosnia-Herzegovina 20 Jan in BBC-SWB 23 Jan]

20 January In the UK, the Chemical and Biological Defence Establishment at Porton Down currently sponsors 66 research agreements and contracts with UK universities and other institutions of higher education, so Parliament is told. {HansC 20 Jan}

20 January Fiji ratifies its signature of the Chemical Weapons Convention, the first country to do so.

21 January In Iraq, 52 UNSCOM personnel arrive from Bahrain in a UN aircraft [see 13-19 Jan]. They include the chemical destruction group, headed by Peter Brough of the United States, that had been delayed on its way to al-Muthanna [see 8 Jan]. {NYT 22 Jan}

21 January In Geneva, the Conference on Disarmament, which had reconvened two days previously, agrees on its program of work. For the first time in 25 years there is no CW or BW item explicitly on its agenda, but there is reference to "the intention of interested members to continue their ongoing open-ended informal consultations on non-proliferation in all its aspects." {CD/PV.637}

21 January The British television program *Newsnight* screens a documentary about the BW weapons activities of the former Soviet Union and their subsequent continuation. Dr Vladimir Pasechnik, who emigrated to Britain in 1989 while director of the Leningrad Institute of Ultrapure Biological Preparations [see 4 Jul 92, 22 Sep 92, 18-21 Nov 92 and 2 Dec 92], speaks of covert weapons work at his former institute that involved the breeding of antibiotic-resistant strains of tularemia and plague bacteria {PA (London) 21 Jan in FBIS-WEU 22 Jan; WT 22 Jan}.

An article in the following week's edition of *Newsweek* contains yet more detail on the Soviet BW program and its Biopreparat [see 19 Sep 92] component. It describes the British and US démarches on the program to Moscow in April and July 1990, and the resultant visits by a joint British-US team to four Soviet biological facilities in early 1991 [see 4 Jul 92]. The article also reports that a second Biopreparat official, senior to Dr Pasechnik, had emigrated in the summer of 1992, to the United States, and had said that the weapons work continued even after President Yeltsin had issued his order for it to stop [see 11 Apr 92] {*Newsweek* 1 Feb}.

23 January In Moscow, an interview with Dr Wil Mirzayanov [see 2 Nov 92] is published in which he deplores what he sees as an exploitation of his whistleblowing by covert interests and also the lack of attention paid to why he had acted as he did. As to the former, he had told the interviewer: "A month after the *Moskovskiy Novosti* article [see 16 Sep 92] the *Baltimore Sun* carried another article [see 18 Oct 92] about the situation in terms of chemical weapons in Russia which cited what was indeed secret information. This testifies that foreign correspondents have independent channels of information. So my arrest had the objective not only of intimidating me and other experts in the field of chemical weapons but also of covering someone's tracks and diverting suspicion from the real sources of secret information and also from those in the West with an interest in obtaining this secret information.... Abroad there are three of our experts who are much better informed in the field of chemical weapons than I am. They know everything. They are now perma-

nently resident in the United States.... Either they were sent specially - meaning that the KGB sent them there for the purpose of spreading disinformation - or a blind eye was turned to their departure. But that means that somebody was benefiting. I know for a fact that many of my scientist colleagues would like to go to the United States and that people linked to secret work are simply not let out of the country. So KGB authorization was essential." {*Kuranty* 23 Jan in FBIS-SOV 26 Jan}

24 January In Moscow, the Russian but not the English edition of *Moscow News* prints the following from what it says is a 1989 CPSU Central Committee staff memorandum: "I believe it to be expedient during 1989-1990 to conduct a number of additional burials of expired chemical weapons manufactured in 1954-62 in the places of past burials. The total weight of chemical weapons which should be scrapped is 112,523 tons." [See also 19 Jan] {MN 24 Jan}

25 January In Darmstadt, the long-running 'poison gas trial' of people from German firms accused of illegally exporting chemical equipment to Iraq [see 27 Apr 92] faces collapse because the chief prosecution expert witness, Professor Richarz of Switzerland [see 17 Aug 90], is too ill to appear in court {FAZ 26 Jan; FR 27 Jan}.

26 January In Baku, a Defense Ministry statement says that Azerbaijan acquired no chemical weapons during the division of property of the former Soviet Army, and that it has no intention of obtaining any or of using them {Azertac 26 Jan in FBIS-SOV 27 Jan}. The statement is in response to reports from Armenian sources that Azerbaijan is likely to use such weapons against Nagorno-Karabakh {Interfax 25 Jan in FBIS-SOV 26 Jan}.

26 January Romania proposes at the CD that the BWC and CWC regimes "might over time be harmonized." {CD/PV.638}

26 January In Angola, there are large quantities of chemical weapons stored under unsafe conditions, according to a former officer of the old GDR army, Uwe Silge, now in charge of the relief organization Cap Anamur. He is reported as having found Soviet 122mm projectiles filled with phosgene in Xangongo Province, as well as mustard gas in a deserted Angolan army dugout. {FAZ 26 Jan; Televisao Portuguesa Internacional (Lisbon) 26 Jan in BBC-SWB 28 Jan}

27 January In the UK parliament, the Department of Trade and Industry describes more of its planning for the National Authority required under Article VII of the CWC [see 19 Jan]: "The UK National Authority will not have the role of verifying compliance with the CWC, and will not therefore require powers to examine work and scientific research in the chemical industry. Verification will be the responsibility of the OPCW, an international body to be set up under the United Nations' auspices [sic]. Primary legislation will be required to allow the OPCW to verify compliance in the UK" {HansC 27 Jan}. Parliament had also been told by the Department, two days previously, that the National Authority would be an executive body, and that no decision had yet been taken about the involvement in it of the chemical industry, the scientific community and other concerned and interested parties: "Such involvement will be the subject of consultation in due course"

27 January In Geneva, CWC signatory states convene under Australian chairmanship for informal consultations on the OPCW Preparatory Commission established during the CWC signature ceremony in Paris [see 13-15 Jan]. Papers distributed for the meeting include Preparatory-Commission agenda papers circulated by the UN Secretary-General in his capacity as Depositary of the CWC. They also include a set of annotations on the PrepCom agenda prepared by the Australian mission and a US paper on the programming of PrepCom working-level activities between the first and second PrepCom plenaries. [See also 2 Dec 92]

28 January In Moscow, a report by the Russian Foreign Intelligence Service, *New Challenge after the 'Cold War': Proliferation of Weapons of Mass Destruction*, is presented to journalists at the Foreign Ministry Press Center by the director of the Service, Yevgeniy Primakov {NG 27 Jan in FBIS-SOV 27 Jan}. Some 130 pages long, the report includes accounts of mass-destruction-weapons programs at various stages of development in 16 countries, among them chemical-weapons programs in Chile, Egypt, India, Iran, Israel, Libya, Syria, probably North Korea and perhaps Pakistan and South Korea, and biological-weapons programs in North Korea (where BW weapons "are being tested on the island territories") and perhaps in Egypt, India, Iran and Iraq, too. In contrast to similar releases of information by other governments, this one defines what the analysts had used as indicators of actual weapons programs, although the hard evidence presented is rarely detailed. It says that, because of the relatively small scale on which militarily significant production of CBW agents would be conducted, "the indispensable role in detecting chemical and biological weapons belongs to the human factor...to human intelligence" {JPRS draft translation}.

Director Primakov says that although some of these countries are trying hard to recruit foreign scientists and engineers for the programs, not a single top-class Russian scientist has gone abroad thus far {Yonhap 29 Jan in FBIS-SOV 29 Jan}.

28 January Egyptian Foreign Minister Amr Musa, addressing the CD in Geneva, says that the statement made by his Israeli counterpart, Shimon Peres, during the CWC signature ceremony in Paris [see 13-15 Jan] is being seen as "Israel's first indication of readiness to be engaged on...nuclear weapons" {CD/PV.639}. A response is now being considered in Cairo {MENA 28 Jan in BBC-SWB 30 Jan}.

28 January In Germany, Federal Intelligence Service Vice-President Paul Münstermann says, in a lecture given in Stuttgart, that at least ten Third World countries have weapons of mass destruction and delivery systems for them {SZ 30-31 Jan in FBIS-WEU 4 Feb}.

28 January In Washington, the Defense Department does not anticipate awarding a contract for the initial US assistance to the Russian chemdemil program [see 9 Nov 92] until the autumn, so Senate Armed Services Committee chairman Sam Nunn is quoted as saying by *Inside the Pentagon*, which also quotes newly confirmed Defense Secretary Les Aspin as promising to hurry things along "to the extent that there are unnecessary or cumbersome procedures or regula-

tions hampering our efforts in this regard." [See also 5 Jan] {ITP 28 Jan}

29 January In Delhi, ministerial level Russian-Indian talks come to an end. Russian Foreign Minister Andrey Kozyrev says that the agenda included issues relating to the nonproliferation of chemical and nuclear weapons. Both he and his Indian counterpart, Dinesh Singh, speak to the press of the need to strengthen nonproliferation policies. {Russia's Radio 29 Jan in BBC-SWB 30 Jan}

29 January In Chile, President Patricio Aylwin flatly rules out the Russian report that Chile continues to manufacture chemical weapons [see 28 Jan]. {Television Nacional de Chile 29 Jan in FBIS-LAT 1 Feb}.

31 January In Moscow, a second scientist, Dr Vladimir Uglev, employed in GSNIIOKhT [see 9 Jan] chemical-weapons development work confirms what Dr Wil Mirzayanov had disclosed about the work [see 23 Jan], adding new detail, though still without disclosing anything about the identity of the CW agents under study. Dr Uglev is currently Peoples Deputy from the Volsk municipal soviet and the Shikhany township soviet. In an article published in today's *Moskovskiy Novosti* and later in an interview published in *Novoye Vremya*, Dr Uglev says that between 1975 and 1990 he had worked at GITOS, the branch of GSNIIOKhT in the closed city of Volsk-17 in Saratov Oblast. He was part of a weapons-development group led by a prominent, but unidentified, Soviet scientist who had in 1973, he said, characterized a "fundamentally new phosphoric toxic substance with nerve-paralyzing action, which later received the name 'Novichok'". His interview as published continues: "For the entire 15 years of my work in the laboratory, more than a hundred chemicals of this class were synthesized. Out of them, only five which represented significant military interest were brought under full investigation [including field testing]. The dubious honor of discovering three of them belongs to me." Patents were applied for in 1976. In 1956, he said, "our scientists were close to the discovery of the new substance. Their calculations, I discovered only later while working in the secret archives. But all the archives were thrown into confusion by the dispatches of the intelligence service about the success of the Swedish scientist [Lars-Erik Tammelin] - all work was stopped and all efforts were thrown towards the creation of our own VX." This work "was conducted in many places - in the Volsk and Volgograd branches of GSNIIOKhT, in GSNIIOKhT itself in Moscow [see also 8 Dec 92], at the military-chemical test range in Shikhany, and so forth".

Vladimir Uglev states that, contrary to what officials had said, Russia does have binary chemical weapons: "Out of three of the new toxicants which I had synthesized, one is the primary component of the binary, which had passed, to my knowledge, successful testing at the test site. I have information about the existence in Russia, that there is a minimum of one more kind of binary weapon, produced on the basis of the Novocheboksarsk [see 23 Sep 92 and 22 Oct 92] product which...we listed as VX. I suppose that the work on both of the binaries had been carried out in parallel.... I know also about production: a certain quantity of the components of the binary weapon are presently located on a secret base in storage somewhere in the Bryansk region [see 19 Jan]." He states, further, that although the CW agent pro-

duced for 15 years at Novocheboksarsk had the same atomic formula as VX, namely $C_{11}H_{26}O_2PSN$, in fact it "differs substantially in the free radicals".

Also: "When I was still a young man starting at Volsk-17, I assumed that chemical warfare was necessary for the country, otherwise the Americans would have already launched a chemical war against us long ago. But from our military I have never been able to obtain an answer to the simple question: do we have a concept of the application of this type of warfare? Today I am convinced that such a concept never existed - chemical warfare was for our generals only a fine means of existing, a 'feeding trough' in view of the government prizes, awards and research grants". {MN 31 Jan; NV 5 Feb}

2 February Germany tells the CD that it is "fully committed to this process of improving the verification provisions of the BW Convention". {CD/PV.640}

4 February In Paris, the Ministry of Foreign Affairs announces that France will be offering training courses in CWC verification open to candidates from any country that has signed the convention. The first session, a 3-month one for 15 participants, is to begin in Paris in mid-September. The organizer is Dr Pierre Cannone.

6 February From firms in Russia, sales videos are reported to be circulating in Germany that seek to boost arms exports; *Der Spiegel* reports, further, that Russian dealers are said increasingly to be offering for sale in the West BW-weapon strains of bacteria from military research laboratories. {DPA 6 Feb in FBIS-WEU 8 Feb}

7 February In Bosnia-Herzegovina, the presidency of the Tuzla regional assembly issues a communiqué which is widely disseminated saying that, since the people of the region have been left with no alternative, toxic chemicals are to be distributed to all fronts and activated if the road-blockades in Herzegovina and central Bosnia are not lifted, and if Dubrava airport near Tuzla is not opened immediately [see also 30 Oct 92] {Radio Bosnia-Herzegovina 7 Feb in FBIS-EEU 8 Feb; Radio Bosnia-Herzegovina 8 Feb in FBIS-EEU 8 Feb; Radio Beograd 8 Feb in FBIS-EEU 9 Feb}. The UN Protection Force in Bosnia-Herzegovina says it is aware of the communiqué {AFP 8 Feb in FBIS-EEU 8 Feb}.

8-12 February In The Hague, the OPCW Preparatory Commission convenes for its first session, attended by 93 of the 137 states that have thus far signed the CWC. The session is opened by the UN Secretary-General through his Special Representative Vicente Berasategui. It is addressed by Netherlands Foreign Minister Dr P H Kooijmans, and by the Acting Mayor of the city. The Commission then adopts its agenda and provisional rules of procedure {PREPCOM/1/2}. The latter, at Rule 33, state that plenary meetings of the Commission shall be held in private unless decided otherwise [see 9 Nov 92]. The proceedings thereupon became closed to all but accredited representatives of the participating governments.

8 February President Clinton, reorganizing his National Security Council, has elevated the profile of nonproliferation, so *Chemical & Engineering News* reports, by separating that

function from arms control in general. The NSC nonproliferation staff is directed by Daniel B Poneman, with Elisa Harris, formerly of the Brookings Institution, as his deputy for CBW, missiles and advanced conventional weapons {C&EN 8 Feb}.

9 February Mauritius ratifies its signature of the Chemical Weapons Convention, becoming the second country to do so [see 20 Jan]. {US Arms Control and Disarmament Agency, "Chemical Weapons Convention Signatories as of February 23, 1993"}

10 February In Bosnia-Herzegovina, chemical weapons are again being used by Serbian forces on the Brcko front [see 27 Dec 92], according to a broadcast report from the Brcko commune press center: "The enemy has launched from Cadjavac 80 mortar bombs charged with chemical agents of the tear gas and asphyxiating gas types against the region of Omerbegovaca. The aggressor also attacked the region of Dizdarsa using howitzers, tanks and mortars, as well as a lethal chemical agent: asphyxiating gas {Radio Bosnia-Herzegovina 11 Feb in FBIS-EEU 11 Feb}. Photographs are later published abroad of Bosnian Muslim fighters in action at Brcko wearing respirators {Ind 26 Feb}.

13 February In the United States, a commissioner of Tooele County, Utah, proposes, with some support, that the nation's entire stockpile of chemical weapons should be accepted for destruction in the new chemdemil incinerator at Tooele Army Depot [see 31 Aug 89] in return for a new county hospital {*Salt Lake Tribune* 16 Feb}.

15 February In Russia, there appears to be movement towards finalization of the chemdemil plan [see 19 Jan]. An official of the lead agency, the Presidential Commission on CBW Convention Problems, is reported on Russia's Radio as saying that three chemdemil facilities are to be set up in the near future: one through conversion of the Khimprom association in Novocheboksarsk, and two that are to be built in Saratov oblast and Udmurtia for conversion of lewisite-mustard [see 26 Oct 92]. The official, Igor Vlasov, is also reported as saying that the complete destruction of Russian chemical weapons will be finished by 2005, and that over 3 billion rubles and \$543 million have been allotted for this purpose. {Radio Rossii 15 Feb in FBIS-SOV 17 Feb}

15 February In Libya, a construction project at Tarhuna, 40 miles southeast of Tripoli, has had supplies of equipment from German firms blocked by the German Federal government, which today confirms that it has intelligence identifying the project as being for a second Libyan poison-gas factory [see 15 Dec 92], as *Die Welt* had just reported, echoing an earlier story in the British periodical *Economist Foreign Report*. According to the previous reporting, the chief contractor at the Tarhuna project is a Thai company that had worked on the Rabta project [see also 12 May 89]; and investigations of several German supplier companies are under way {IHT 16 Feb; BG 16 Feb; WP 17 Feb; IHT 18 Feb}. Later, US intelligence agencies are reported as saying that Libya is indeed building a chemical-weapons factory near Tarhuna - underground, and disguised as part of a water project - to augment the chemical complex at Rabta {NYT 18 Feb}. US officials reportedly say that the Tarhuna facility is considered to be about three years from completion, and that the site at

Sebha [see 10 Apr 91] is now dormant. {WP 19 Feb}

Libya denounces this reporting as "psychological terrorism" and invites international news media to Tarhuna to verify that the project is part of Libya's "Great Man-Made River" project. {WP 21 Feb}.

16 February In Washington, plans for a 'Nonlethality Strategic Initiative' are once again being floated, now that Bush appointees who had been blocking earlier consideration have departed, so *Defense Week* reports {DW 16 Feb}. The Army has said that the draft doctrine and requirements paper *Operations Concept for Disabling Measures* being circulated for comment by its Training and Doctrine Command [see 4 Sep 92] is not expected to be finalized until late summer {*Defense Electronics* February}.

22 February In Iraq, officials threaten to shoot down two UN helicopters carrying UNSCOM inspectors engaged in a complex and novel form of search for weapons proscribed under Security Council resolution 687 (1991), in this case ballistic missiles. The search, led by Nikita Smidovich of Russia, concerted inspectors on the ground, the helicopters and aerial surveillance by a U-2 aircraft. {FT 22 & 25 Feb; IHT 23 & 24 Feb; NYT 24 Feb}

23 February In the United States, the General Accounting Office releases a new study of the Army's chemdemil effort [see also 16 Jun 92] {GAO/NSIAD-93-50}. In describing the various problems, delays and shutdowns at the Johnston Atoll prototype facility [see 2 Jan] on which the other eight planned facilities are to be modelled, as well as the time required to obtain the requisite environmental permits, the report raises doubts about the ability of the Army to meet its current chemdemil schedule {ITP 25 Feb}.

23-24 February In the United States at Aberdeen Proving Ground, advance planning briefings for industry on CBW defense and on chemdemil, organized by the American Defense Preparedness Association, are co-hosted and provided by the US Army Chemical and Biological Defense Agency and the US Army Chemical Materiel Destruction Agency.

24 February In the US Congress, the newly confirmed Director of Central Intelligence, R James Woolsey, gives public testimony on the complexity of the challenge posed to the intelligence community by the proliferation of weapons of mass destruction.

As regards CBW [see also 15 Dec 92], he says: "More than two dozen countries have programs to research or develop chemical weapons, and a number have stockpiled such weapons, [including] Libya, Iran and Iraq. The military competition in the always volatile Middle East has spurred others in the region to pursue chemical weapons. We have also noted a disturbing pattern of biological weapons development following closely on the heels of the development of chemical weapons".

About the Iranian CBW program he says: "Iran...used chemical weapons in response to Iraqi use during the Iran/Iraq war, and it can still manufacture hundreds of tons of chemical agent a year. Although it produces primarily choking and blister agents, Iran may also have a stockpile of nerve agents. Biological weapons, if not already in produc-

CWC Non-Signatory States As of 15 March 1993

African states:

Angola
Botswana
Chad
Djibouti
Egypt
Lesotho
Libya
Mozambique
Rwanda
Sao Tome & Principe
Somalia
Sudan
Swaziland
Tanzania

Asian states:

Bhutan
Iraq
Jordan
Laos
Lebanon
Maldives
North Korea
Solomon Islands
Syria
Taiwan
Vanuatu

Eastern European states:

Armenia
Bosnia & Hercegovina
Latvia
Turkmenistan
Uzbekistan
Yugoslavia

Latin American and

Caribbean states:

Antigua & Barbuda
Bahamas
Barbados
Belize
Dominica
Grenada
Guyana
Jamaica
Panama
St Christopher & Nevis
St Lucia
St Vincent & Grenadines
Suriname
Trinidad & Tobago

Western European and

Other states:

Liechtenstein

tion, probably are not far behind."

Later: "Iraq's biological weapons capability is perhaps of greatest immediate concern. Baghdad had an advanced program before Desert Storm, and neither war nor inspections have seriously degraded this capability. The dual-use nature of biological weapon equipment and techniques makes this the easiest program to hide."

Also giving testimony is the director of the CIA-based interagency Nonproliferation Center, Gordon Oehler, who speaks of biological-weapons experiments in North Korea involving anthrax, cholera and plague bacteria, in this regard confirming the recent Russian report [see 28 Jan and see also 19 Jan]. {WSJ 25 Feb}

24 February On the report of Chinese noncompliance with the BWC which President Bush had included in a statutory annual report to the Congress the previous month [see 19 Jan], the *Washington Post* quotes unidentified US intelligence officials as saying that, for political reasons, similar passages in both the classified and unclassified versions of the two previous annual reports -- consensus intelligence-community statements -- had been deleted by the White House prior to transmission to the Congress. {WP 24 Feb} [See also 18 Nov 91]

According to the *Post*, those same officials "said US intelligence concerns about China are partly based on evidence

that China is conducting biological research at two ostensibly civilian-run research centers that Americans say are actually controlled by the Chinese military. The research centers were known to have engaged previously in production and storage of biological weapons, the officials said. They said US suspicions intensified in 1991 when one of the suspected biological centers was enlarged. Suspicions heightened further last spring, after Beijing made what one US official termed a 'patently false' declaration to the United Nations that it had never made any germ weapons or conducted any work...to bolster defenses against a biological attack." The Chinese Foreign Ministry subsequently describes all this as

groundless, denying that China has a germ-weapons program. (WP 26 Feb)

25 February In Russia, the chemical-weapons storage facility at Kambarka has recently received its first visit by American journalists, according to an account published in today's *Wall Street Journal*. The facility, constructed in the early 1950s, holds some 6300 tons of lewisite in 80 storage tanks. Plans are being developed for detoxification of the lewisite, possibly by the German company Metallgesellschaft AG if the German government agrees to cover the costs, currently estimated at some \$185 million. [See also 21 Dec 92] (WSJ 25 Feb)

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